

Boundary Change Justifications

December 2019

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No proposed changes

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MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Elk, Lion, Deer

Hunting Districts: 130, 132, 140, 170

Year: 2020

- 1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

This proposal would remove HD 132 and place the private lands from HD 132 into HD 170, and the public forest service lands from HD 132 into HDs 130 and 140. These boundary changes would pertain to deer, elk and mountain lion regulations. Antlerless elk permits for HD132 (132-00 and 132-01) would be removed. Quotas for mountain lions in HD140 and HD130 would be increased slightly to accommodate the additional land mass in these newly redrawn districts.

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

Currently, private lands in HD132 are managed in concert with deer and elk regulations for HD 170, so it makes sense to include those private lands into HD 170. The remaining lands in HD 132 are within US Forest Service boundaries and including these areas into adjacent hunting areas that are primarily Forest Service Lands (HD140 and HD130) would simplify regulations and make sense biologically for deer, elk and mountain lions.

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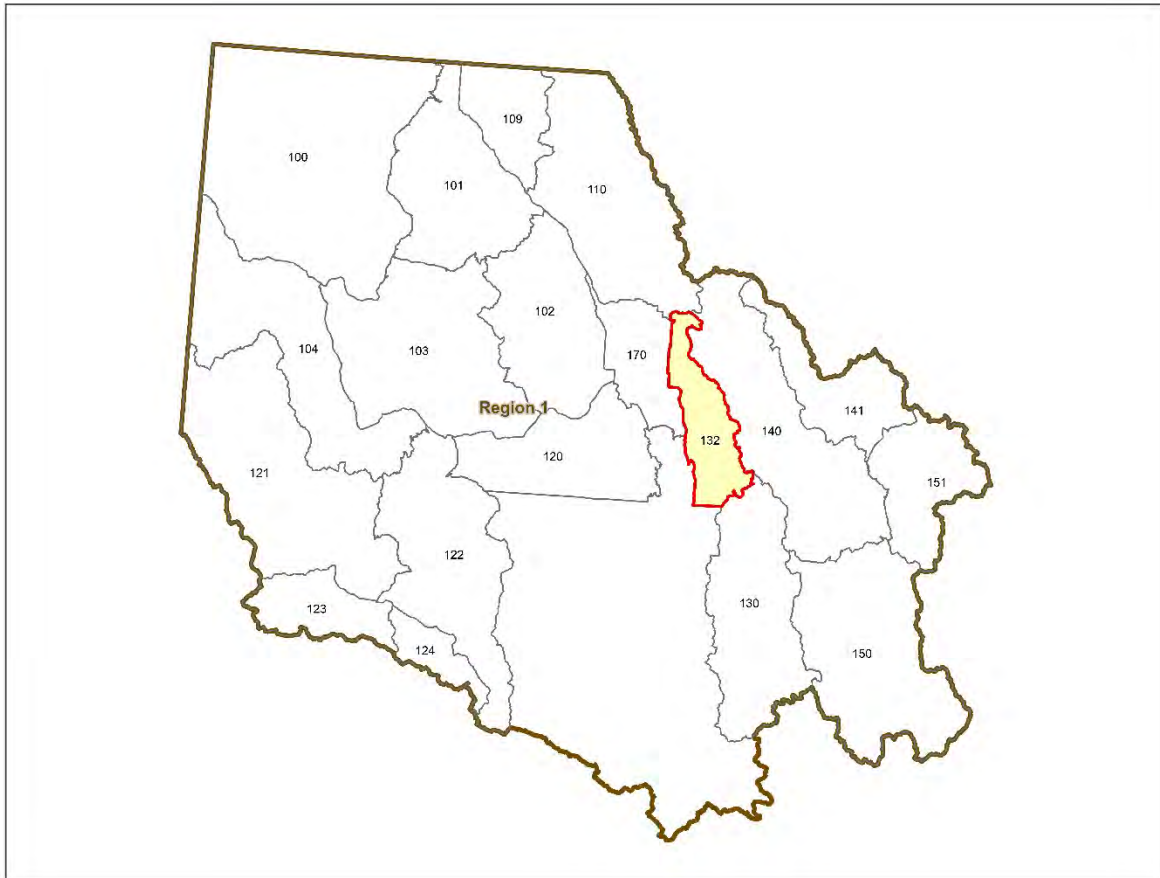


Figure 1. Current HD 132

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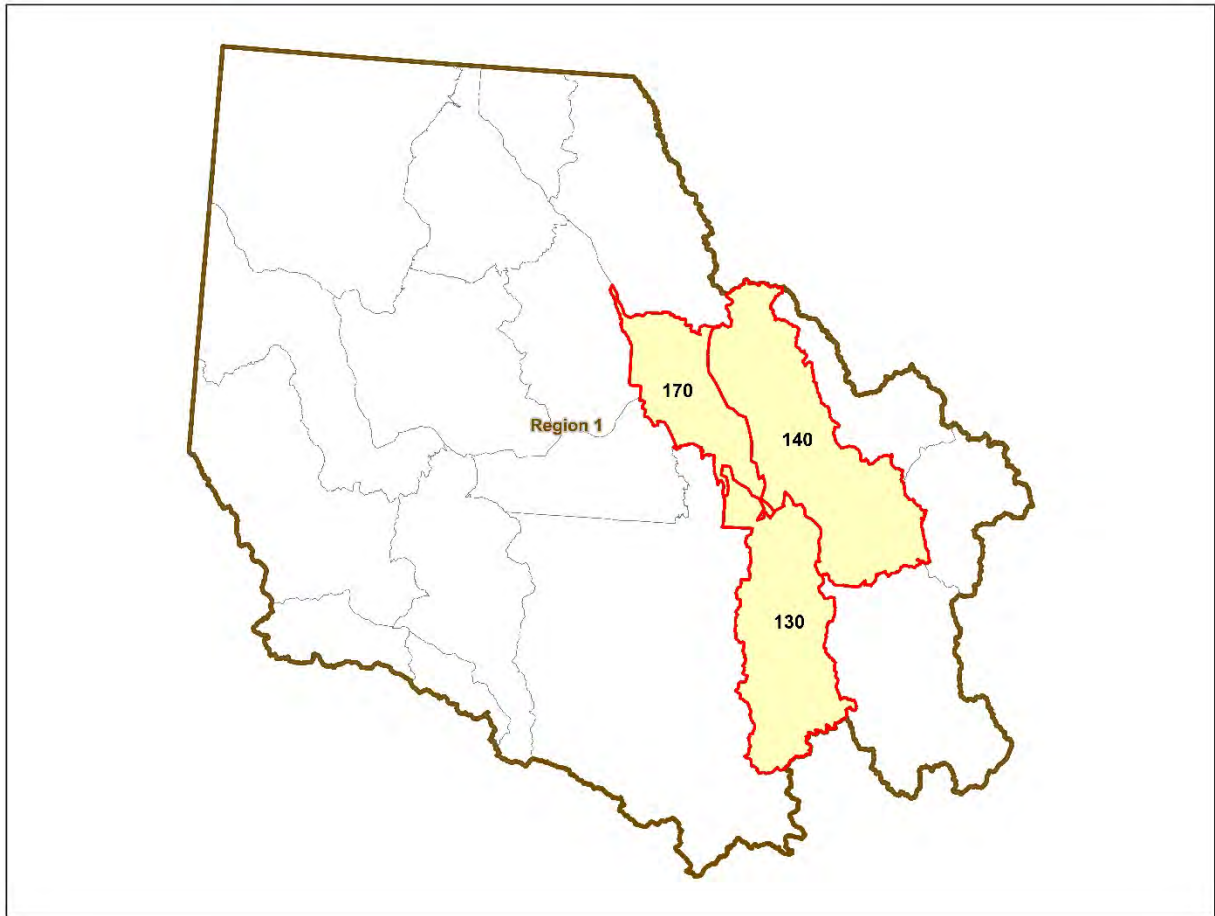


Figure 2. Proposed HDs 170, 130, and 140.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

NA

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

NA

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

NA

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6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

NA

Submitted by: Jessy Coltrane, Area Wildlife Biologist

Date: 10/17/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Elk

Hunting Districts: 150, 151

Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal would combine hunting districts 150 and 151 into a single hunting district, hence forth referred to as HD 150. This hunting district would pertain to deer, elk, and mountain lion regulations.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

Currently, hunting districts 150 and 151 have identical regulations for deer, elk, and mountain lion. Both districts are within the wilderness boundaries of the Bob Marshall Wilderness Complex. Combining these two hunting districts would simplify the regulations and have no change on how we manage harvest in these districts.

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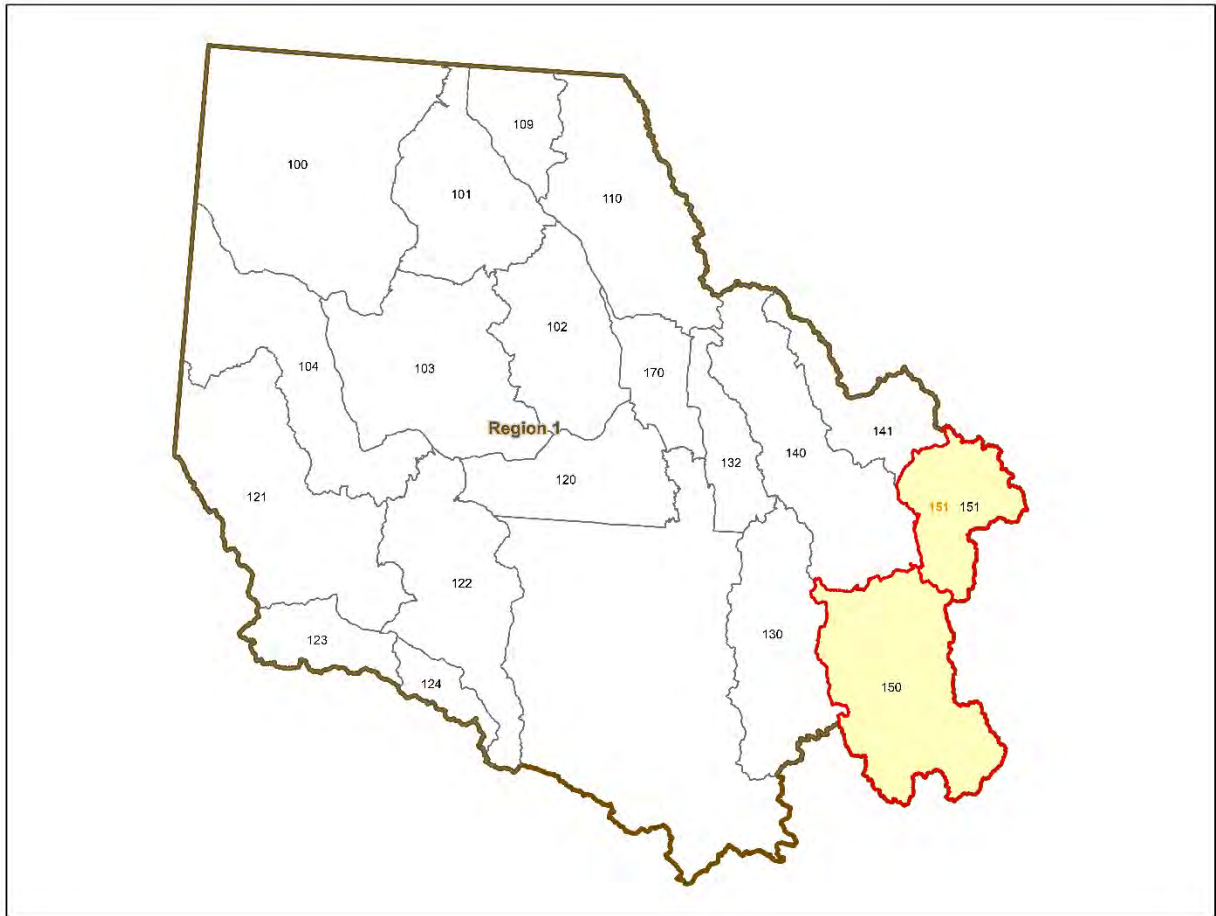


Figure 1. Current hunting district boundaries.

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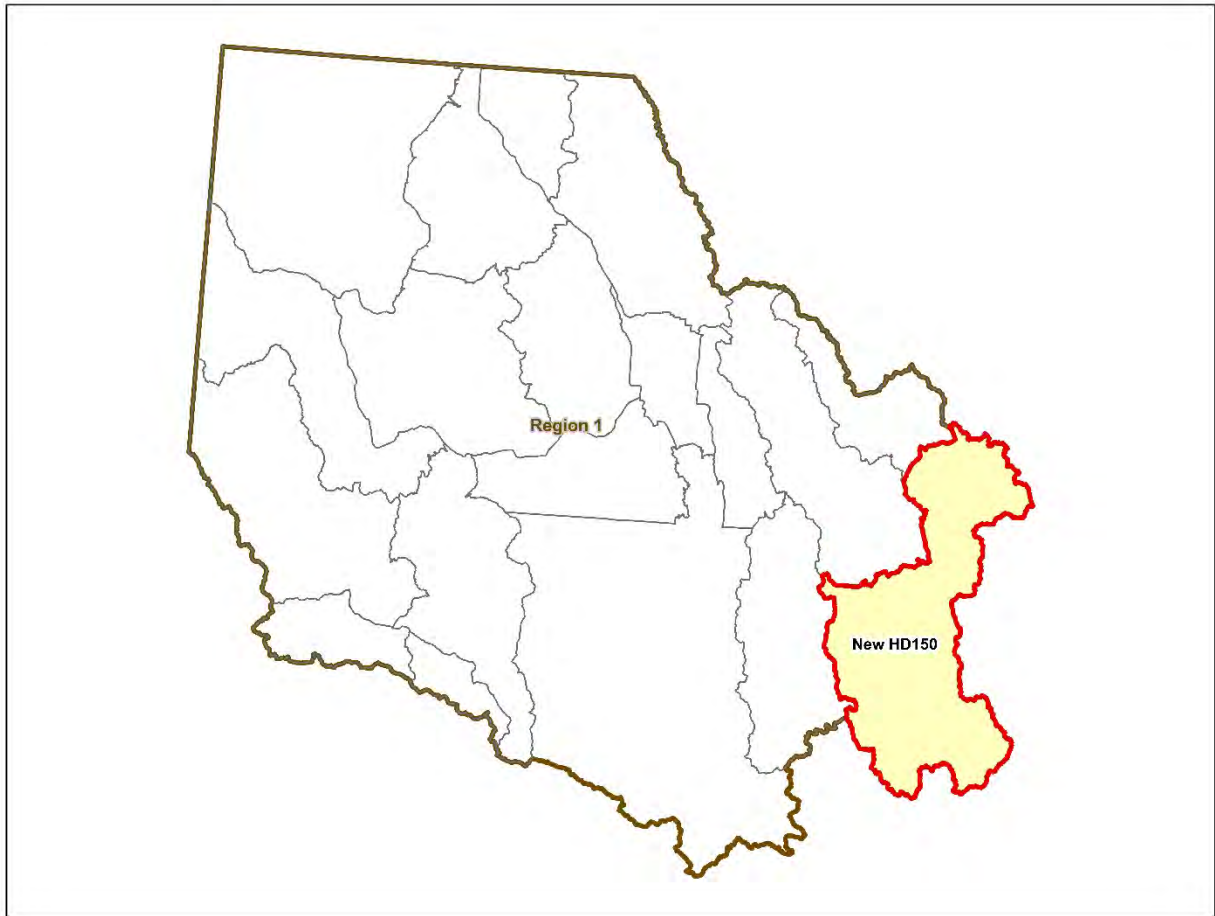


Figure 2. New proposed HD 150

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc. NA
4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

NA

5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

NA

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

Boundary Change Justifications December 2019

Submitted by: Jessy Coltrane, Area Wildlife Biologist

Date: 10/17/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Deer, Elk

Region: 2

Hunting District: HDs 211 and 214

Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

A boundary change for Deer/Elk/Antelope HDs 211 and 214 is proposed to simplify elk and deer management in the Flint Creek and Warm Springs valleys.

- 1) Using the road feature of the East Fork Reservoir Road and Denton Point Road to separate the private lands elk herd that moves between HDs 210, 211 and 214 and the rest of HD 214 which is primarily a different herd on public land.
- 2) Remove the East Fork of Rock Creek Road boundary.

New HD 211 boundary:

That portion of Granite County lying within the following-described boundary: Beginning at Skalkaho Pass, then east along State Route 38 **to its junction with Hiway 1, then southeasterly to the junction with** Storm Lake Road, then southwesterly along Storm Lake Road to Storm Lake, then follow the Storm Lake Trail east then south to Storm Lake Pass, and to ~~to its junction with the East Fork of Rock Creek Trail above East Fork Reservoir, then southerly along the East Fork Trail to its junction with the Page Creek Trail, then easterly up said trail to its junction with the Continental Divide, then along the Continental Divide in a southwesterly direction to the Bitterroot River-Rock Creek Divide, then along said divide in a northerly direction to State Route 38, the point of beginning.~~

New HD 214 boundary:

~~These~~ That portion of Deer Lodge and Granite County lying within the following-described boundary: Beginning at the junction of State Route 1 and State Route 274 (Mill Creek

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Road), then in a southwesterly direction along said route to the Continental Divide, then in a westerly direction along said divide to Storm Lake Pass, then northerly the Page Creek Trail, then northwesterly down Storm Lake trail to Storm Lake Road, then northerly along said trail road to the road above East Fork Reservoir, then northwest and north along the East Fork Creek Road to its junction with State Route 38 East Fork Reservoir Road, then continue northeasterly to Lakeshore Road and continue east to Denton Point Road until the junction with State Route 1, then northeast along said route to its junction with State Route 1 at Porter's Corner, then east and along State Route 1 to its junction with State Route 274, the point of beginning.

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

Objectives are:

- To improve FWP hunting district boundaries by better mirroring landscape-level wildlife populations and management.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

The success of this proposal will be measured by:

- Simplified hunting regulations and more effective deer and elk management implementation
- Satisfaction with hunters and landowners

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

The current HD 211 and HD 214 boundary divides an elk herd that moves regularly across the private lands. This results in large swings in population counts during winter surveys, depending on where elk are on the day of survey. This can also affect proper management of HD 214 and HD 211, which are often below objective, despite higher counts of elk on the private ground near Hiway 38.

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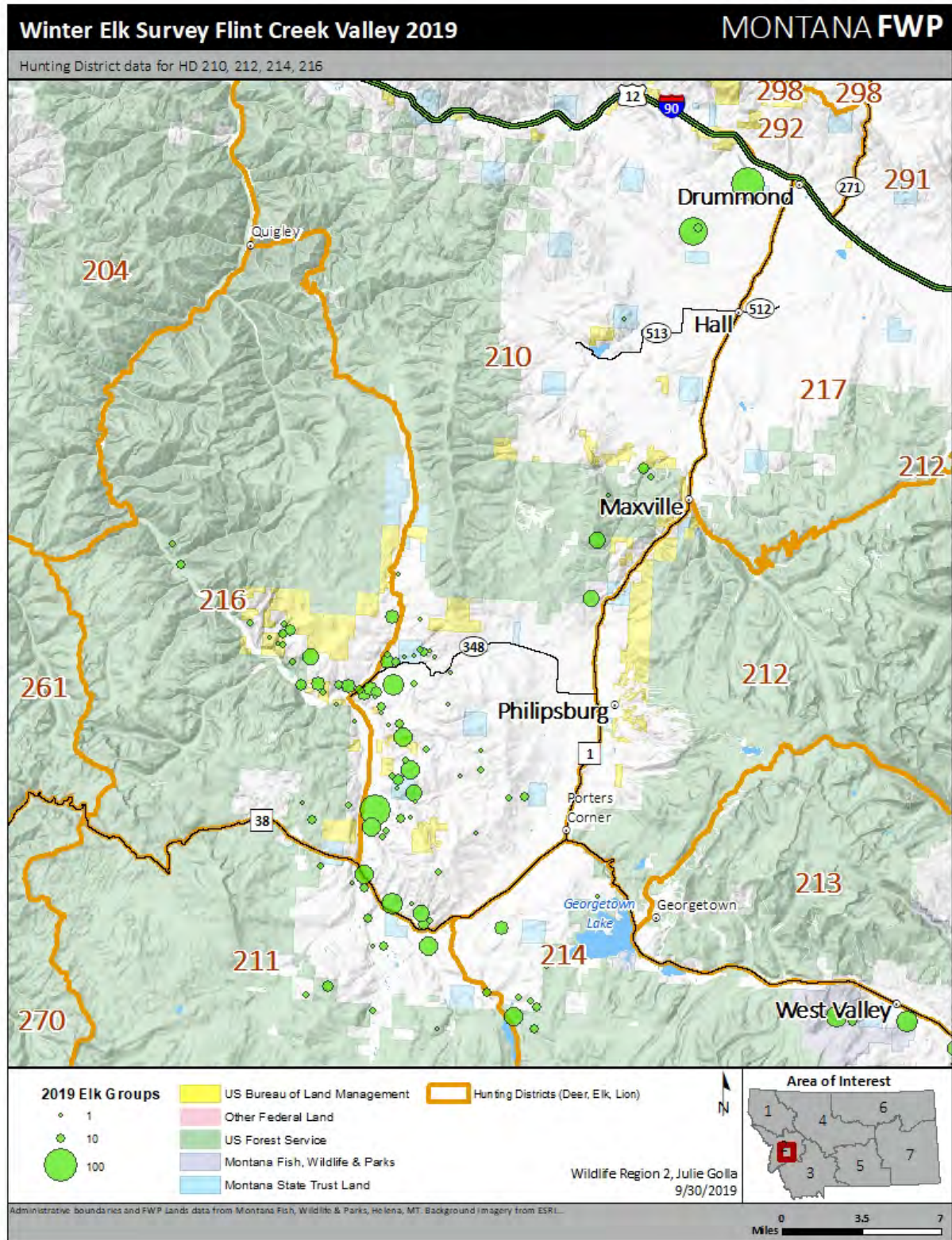


Figure 1. Winter elk survey locations from March 2019. Note the groups of elk in HDs 211 and 214 in relation to the boundary between them.

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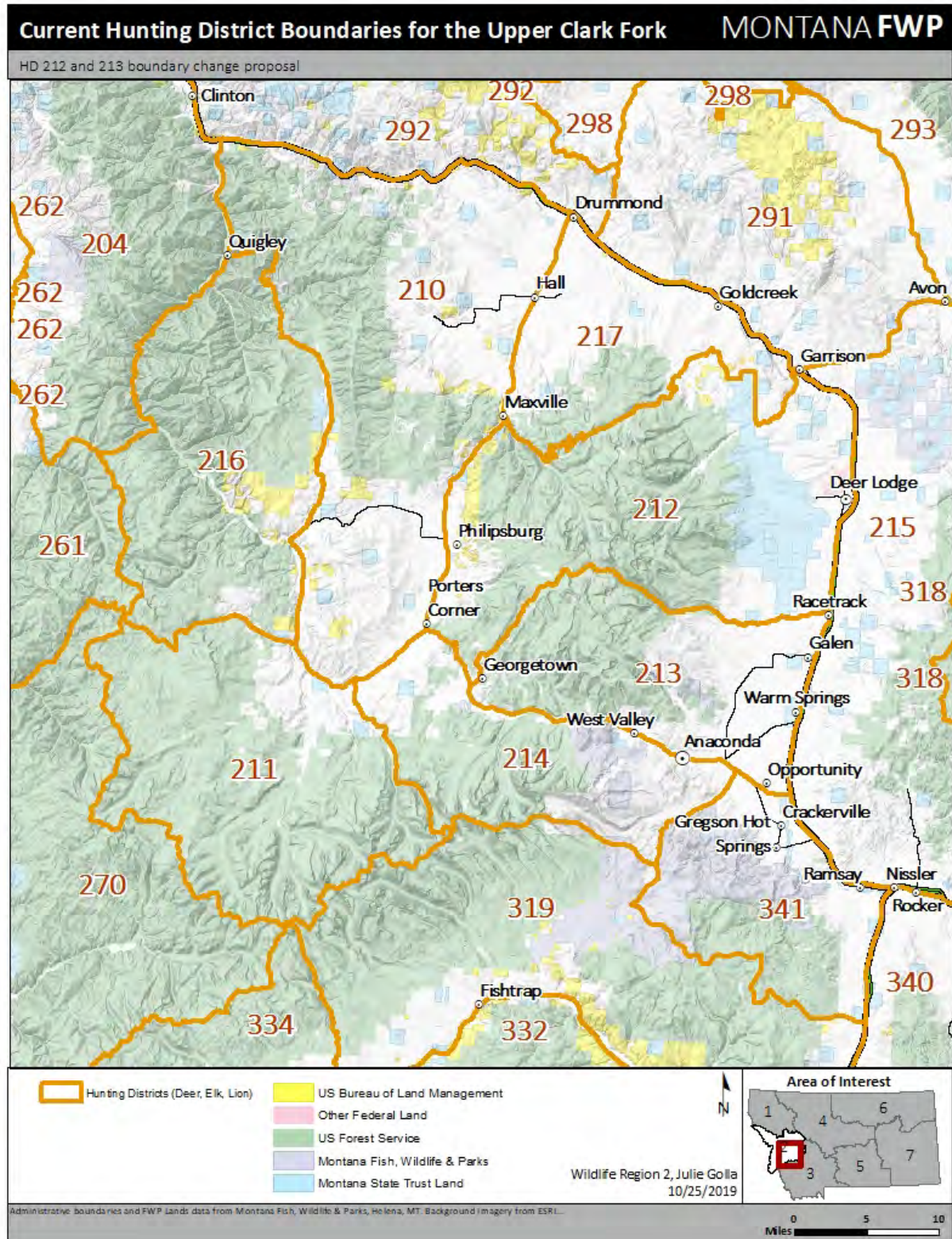


Figure 2. Current boundary of East Fork of Rock Creek road off Hiway 38.

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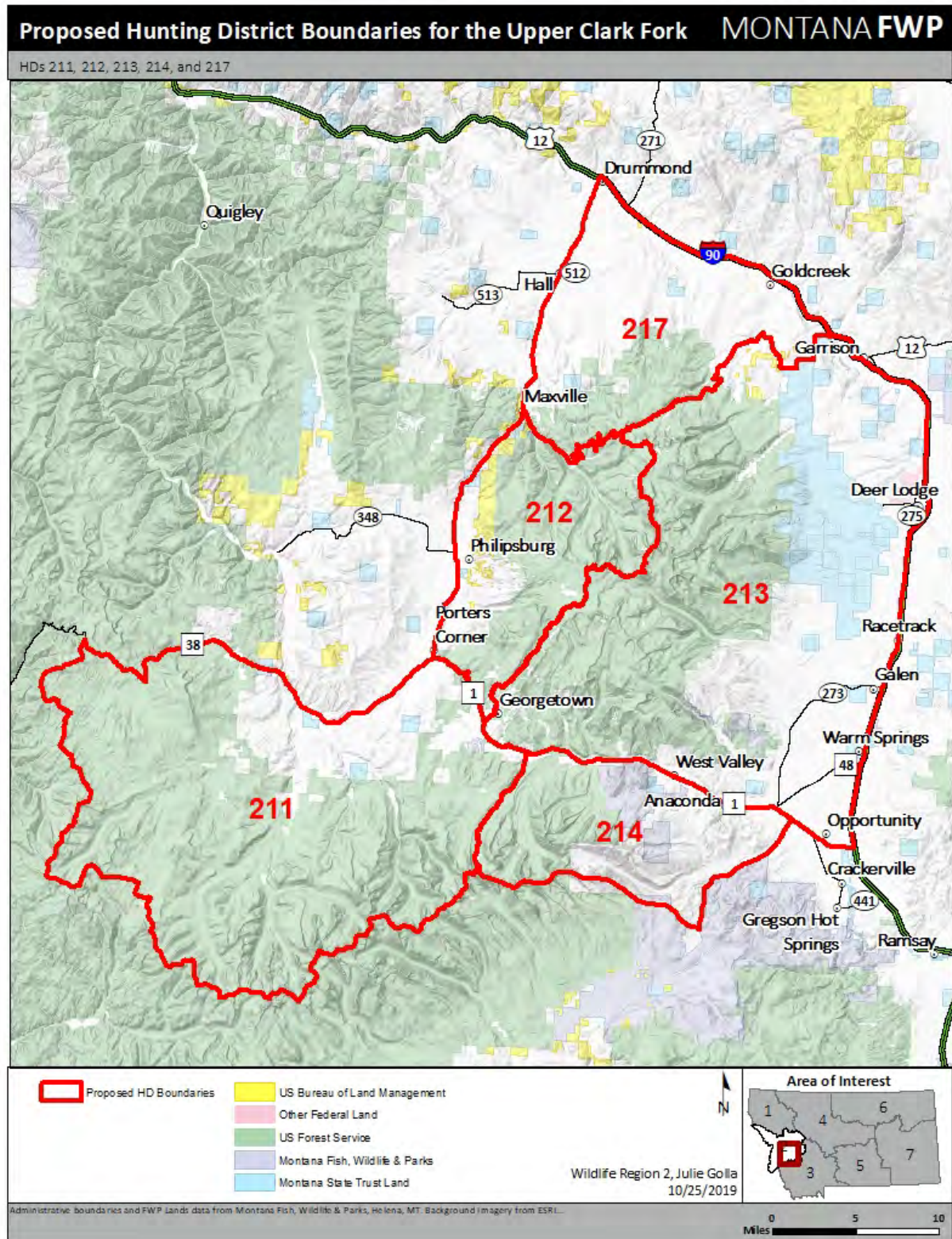


Figure 3. Proposed new boundary of HD 214 and 211 following State Route 1 and Storm Lake Road.

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- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

Private lands in the current western portion of HD 214 will be joined with the private lands complex of HD 211. This makes more sense management-wise to allow hunting of private lands elk and deer, while also simplifying regulations and access for landowners and sportsmen in the area. These lands in the new HD 211 function as wintering grounds for deer and elk, while the new area of HD 214 is mostly summer range in between the winter range of the Garrity Mountain elk herd.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

Representatives of the Anaconda Sportsman's Club are in support of this boundary change. The community of Anaconda values the wildlife and hunting opportunities in HD 214 due to its proximity to town. Concerns regarding numbers of elk and deer on the east end of HD 214 often contradict the need for increased harvest of elk and deer harvest on the west end in the Flint Creek and Rock Creek watersheds.

Submitted by: Julie Golla

Date: November 14, 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

**MONTANA FISH, WILDLIFE & PARKS
HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION**

Species: Deer, Elk

Region: 2

Hunting District: HDs 212 and 213

Boundary Change Justifications

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Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

It is proposed to:

- Use the geographical feature of the Flint Creek Mountain watershed divide as a new boundary between HD 212 and 213 to separate the east and west elk and deer populations.
- Remove the Racetrack Creek boundary of HDs 212 and 213.

New HD 213 boundary:

Those portions of Granite, Powell, and Deer Lodge Counties lying within the following described boundary: Beginning at the junction of the Red Lion Road and State Route 1 at Georgetown Lake, then in a northeasterly direction along Red Lion Road and Trail until it intersects with the Flint Creek Mountain watershed divide just west of Racetrack Lake. Follow the divide until meeting the Eureka Ridge Road (FS 1500), then northeasterly on said road to FS Road 1544, then southeast on said road immediately to FS Road 636 (Gold Creek Lakes Road), then northeasterly on said road to South Mullan Trail Road, then easterly on said road to Gold Creek Road, then, then southeasterly on said road to the northwest corner of Section 30 (T9N, R10W), then easterly on said section line to the southwest corner of Section 20 (T9N, R10W), then north on said section line to northwest corner of the SW 1/4 Section 20 (T9N, R10W), then east to the northeast corner of the SE 1/4 Section 20 (T9N, R10W), then north on the west section lines of sections 21 and 16 (T9N, R10W), then east at the northwest corner of Section 16 (T9N, R10W), then north at the northeast corner of said section and along the western section line of Section 10 (T9N, R10W) until it reaches interstate 90, then south on the east section lines of sections 20, 29 and 32 (T9N, R10W) to the southeast corner of Section 32 (T9N, R10W), then east to the northeast corner of Section 5 (T8N, R10W), then south on the east section line of Section 5 (T8N, R10W) to Old Stage Road, then southeast on said road to Rock Creek, then northeast down said creek to Sawmill Road, then east and northerly on said road across then along said interstate in a southerly direction to its junction with State Route 1, then along said route in a westerly direction to its junction with Red Lion Road the point of beginning.

New HD 212 boundary:

Those portions of Granite County lying within the following described boundary: Beginning at the junction of State Route 1 and FS Road 676 (Maxville Road, becomes Princeton Road) at Maxville, then southeasterly on said road to FS Road 1544, then southeast on said road until it intersects with the Flint Creek Mountain watershed divide at Eureka Ridge Road (FS 1500), then follow the divide south and east until it intersects with the Red Lion Road and Trail just west of Racetrack Lake, FS Road 636 (Gold Creek Lakes Road), then northeasterly on said road to South Mullan Trail Road, then easterly on said road to Gold

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~~Creek Road, then northeast on said road to Old Stage Road, then southeasterly on said road to the northwest corner of Section 30 (T9N, R10W), then easterly on said section line to the southwest corner of Section 20 (T9N, R10W), then north on said section line to northwest corner of the SW 1/4 Section 20 (T9N, R10W), then east to the northeast corner of the SE 1/4 Section 20 (T9N, R10W), then south on the east section lines of sections 20, 29 and 32 (T9N, R10W) to the southeast corner of Section 32 (T9N, R10W), then east to the northeast corner of Section 5 (T8N, R10W), then south on the east section line of Section 5 (T8N, R10W) to Old Stage Road, then southeast on said road to Rock Creek, then northeast down said creek to Sawmill Road, then east and northerly on said road across the Clark Fork River to Garrison Frontage Road, then east on said road about 100 feet to Interstate 90 near Garrison, then southerly along Interstate 90 to the Racetrack Creek Bridge, then westerly up Racetrack Creek to Racetrack Lake and the trail to Red Lion Road, then southwesterly down said road to its junction with State Route 1 at Georgetown Lake, then northerly along said route to FS Road 676 at Maxville, the point of beginning.~~

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

Objectives are:

- To improve FWP hunting district boundaries by better mirroring landscape-level wildlife populations and management.
- Simplify hunting regulations by removing consistent duplications of deer and elk hunting opportunities in the current HDs 212 and 213.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

The success of this proposal will be measured by:

- Simplified hunting regulations and more effective management implementation
- Satisfaction with hunters and landowners

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

The elk and deer populations of the current HDs 212 and 213 are over objective, though have been declining since introduction of private lands B licenses and shoulder seasons. Due to the frequent travel of large elk groups across the current Racetrack Creek boundary, annual winter surveys of elk groups can introduce variability in population estimates, leading to misleading individual hunting district populations. By changing the

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districts to different watersheds, future elk data will match the landscape and make elk management more consistent and effective.

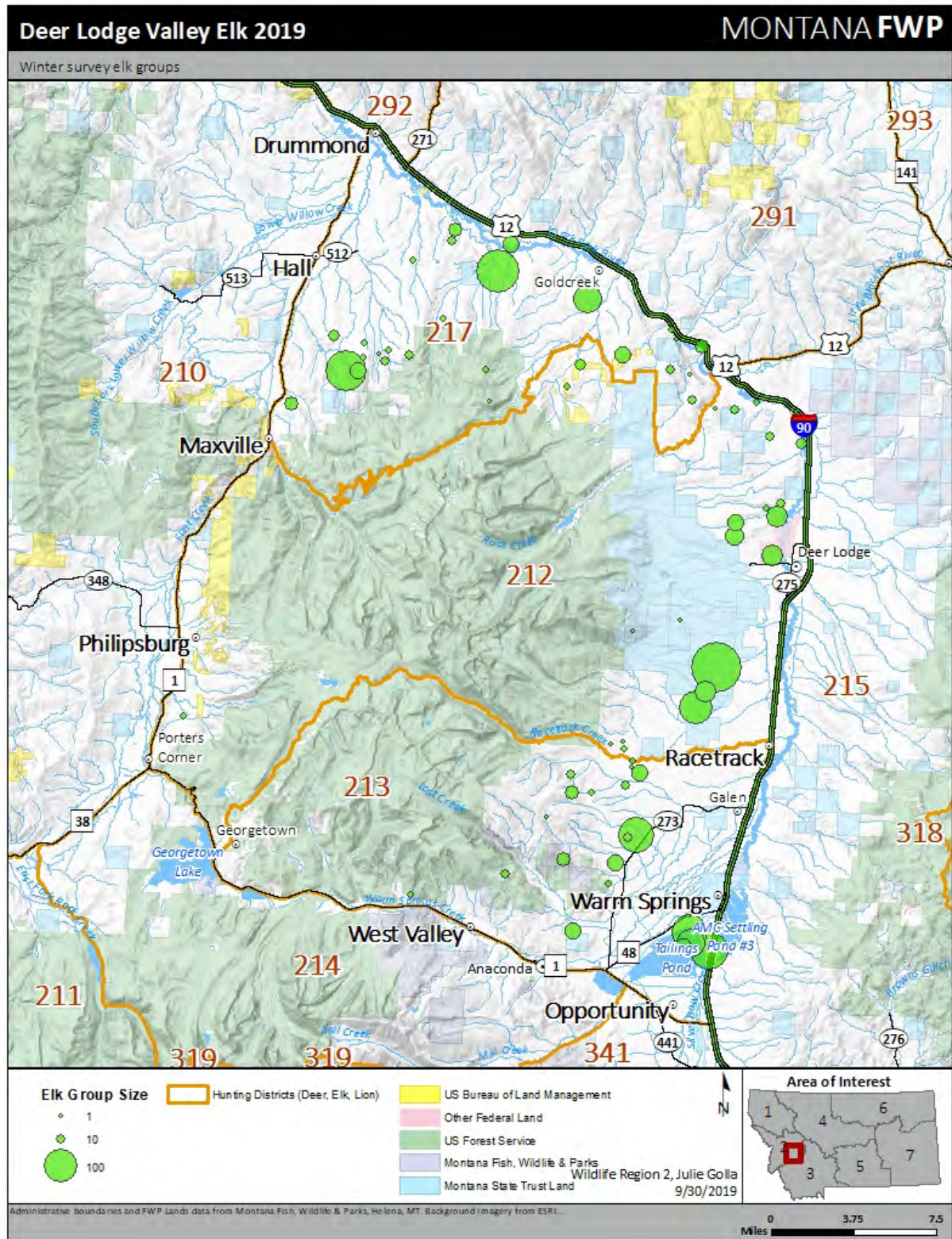


Figure 1. Elk distribution and group size in March 2019 during winter elk surveys.

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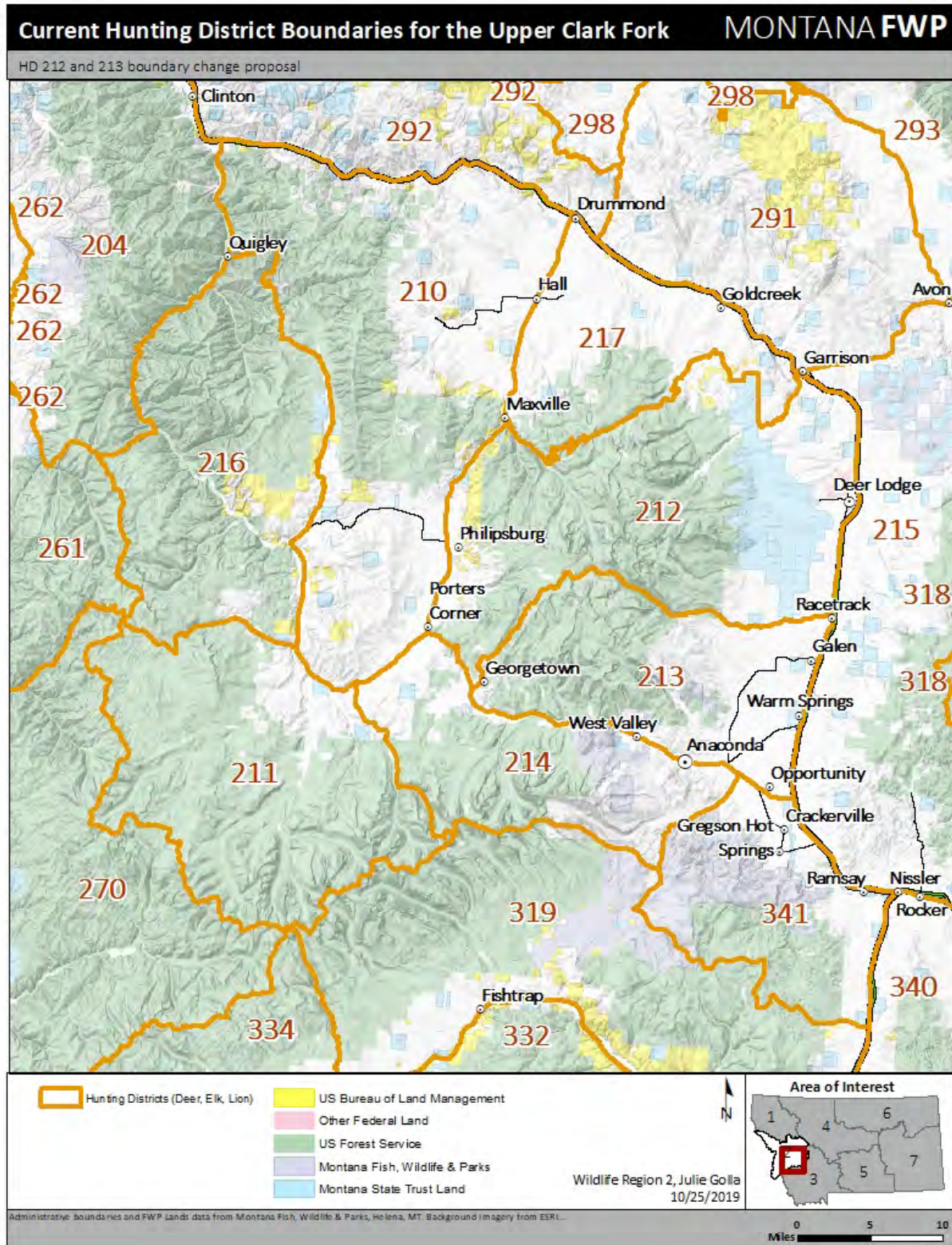


Figure 2. Current hunting district boundaries in the Upper Clark Fork.

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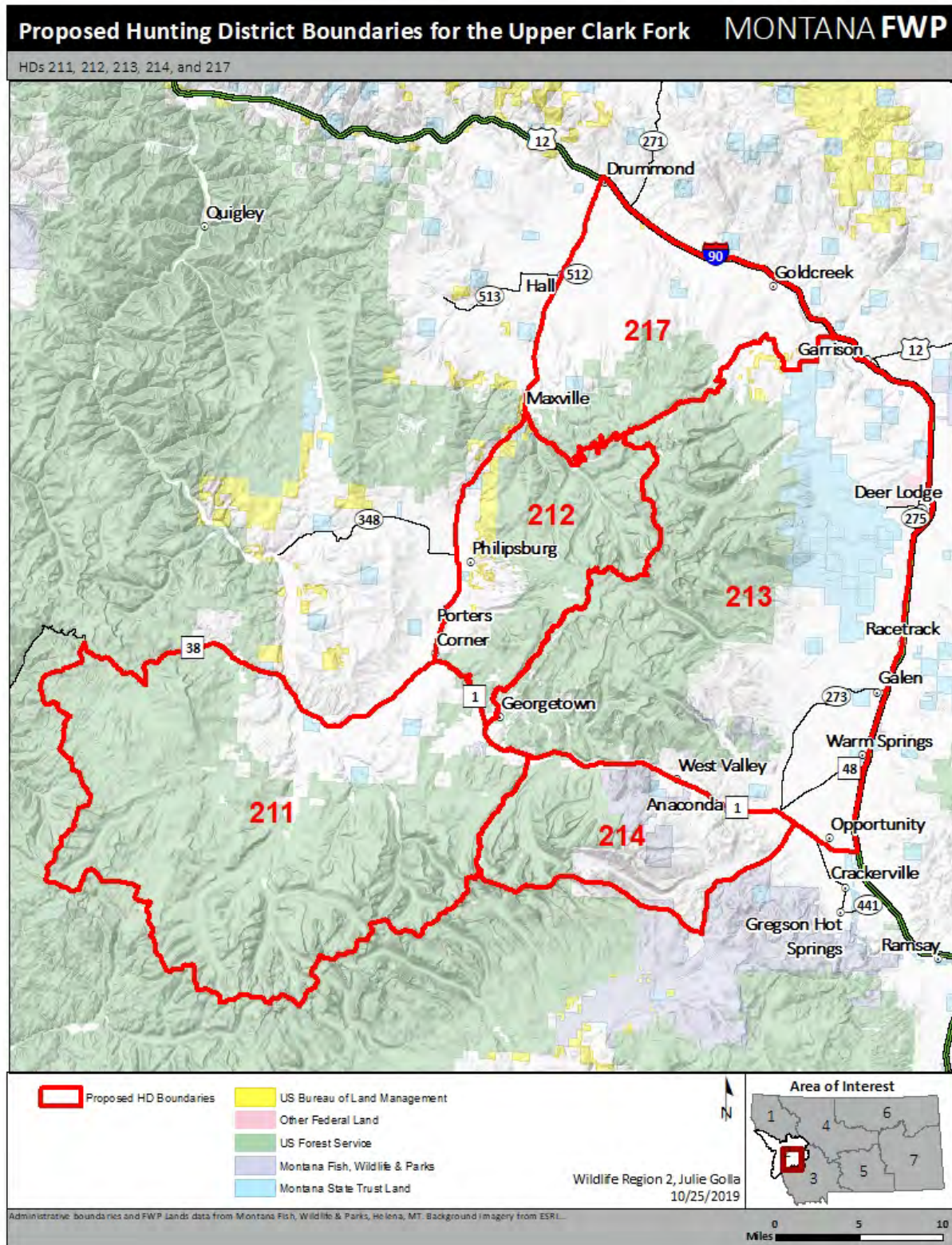


Figure 3. All proposed hunting district boundary changes for 2020 in the Upper Clark Fork. Note the 212 and 213 change along the Flint Creek Mountains divide.

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December 2019**

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

The proposed boundary change will help include the private lands of the Deer Lodge valley into one hunting district for simplified wildlife management and game damage mitigation efforts. The Philipsburg Valley has mostly public land until you reach the other boundary of State Route 1.

Weather is similar throughout the area of these hunting districts

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

Local landowners and sportsmen support the change in the Racetrack Creek boundary, as it has been a point of frustration with the increased private land hunting access and participation in the Deer Lodge valley. The Prison Ranch will have the same hunting opportunities as it did in HD 212, only a change in hunting district classification will occur for the overall elk management of the new HD 213.

There has not been opposition to this boundary change proposal to date.

Submitted by: Julie Golla

Date: November 13, 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

**MONTANA FISH, WILDLIFE & PARKS
HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION**

Species: Deer, Elk

Region: 2

Boundary Change Justifications December 2019

Hunting District: HDs 213 and 217

Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

It is proposed to:

- Use different section lines to simplify the HD 213 and 217 shared boundary near Garrison.

New HD 213 boundary:

Those portions of Granite, Powell, and Deer Lodge Counties lying within the following described boundary: Beginning at the junction of the Red Lion Road and State Route 1 at Georgetown Lake, then in a northeasterly direction along Red Lion Road and Trail until it intersects with the Flint Creek Mountain watershed divide just west of Racetrack Lake. Follow the divide until meeting the Eureka Ridge Road (FS 1500), then northeasterly on said road to FS Road 1544, then southeast on said road immediately to FS Road 636 (Gold Creek Lakes Road), then northeasterly on said road to South Mullan Trail Road, then easterly on said road to Gold Creek Road, then, then southeasterly on said road to the northwest corner of Section 30 (T9N, R10W), then easterly on said section line to the southwest corner of Section 20 (T9N, R10W), then north on said section line to northwest corner of the SW 1/4 Section 20 (T9N, R10W), then east to the northeast corner of the SE 1/4 Section 20 (T9N, R10W), then north on the west section lines of sections 21 and 16 (T9N, R10W), then east at the northwest corner of Section 16 (T9N, R10W), then north at the northeast corner of said section and along the western section line of Section 10 (T9N, R10W) until it reaches interstate 90, then south on the east section lines of sections 20, 29 and 32 (T9N, R10W) to the southeast corner of Section 32 (T9N, R10W), then east to the northeast corner of Section 5 (T8N, R10W), then south on the east section line of Section 5 (T8N, R10W) to Old Stage Road, then southeast on said road to Rock Creek, then northeast down said creek to Sawmill Road, then east and northerly on said road across then along said interstate in a southerly direction to its junction with State Route 1, then along said route in a westerly direction to its junction with Red Lion Road the point of beginning.

New HD 217 boundary:

Those portions of Granite and Powell Counties lying within the following described boundary: Beginning at the junction of Interstate 90 and State Route 1 near Drummond, then south on said route to FS Road 676 (Maxville Road, becomes Princeton Road) at Maxville, then southeasterly on said road to FS Road 1500 (Princeton Gulch Road), then northeasterly on said road to FS Road 1544, then southeast on said road immediately to FS Road 636 (Gold Creek Lakes Road), then northeasterly on said road to South Mullan Trail Road, then easterly on said road to Gold Creek Road, then northeast on said road to Old Stage Road, then southeasterly on said road to the northwest corner of Section 30 (T9N, R10W), then easterly on said section line to the southwest corner of Section 20

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(T9N, R10W), then north on said section line to northwest corner of the SW 1/4 Section 20 (T9N, R10W), then east to the northeast corner of the SE 1/4 Section 20 (T9N, R10W), then north on the west section lines of sections 21 and 16 (T9N, R10W), then east at the northwest corner of Section 16 (T9N, R10W), then north at the northeast corner of said section and along the western section line of Section 10 (T9N, R10W) until it reaches interstate 90 then south on the east section lines of sections 20, 29 and 32 (T9N, R10W) to the southeast corner of Section 32 (T9N, R10W), then east to the northeast corner of Section 5 (T8N, R10W), then south on the east section line of Section 5 (T8N, R10W) to Old Stage Road, then southeast on said road to Rock Creek, then northeast down said creek to Sawmill Road, then east and northerly on said road across the Clark Fork River to Garrison Frontage Road, then east on said road about 100 feet to Interstate 90 near Garrison, then northwesterly on said Interstate to its junction with State Route 1 near Drummond, the point of beginning.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

Objectives are:

- To improve FWP hunting district boundaries by better mirroring landscape-level wildlife populations and management.
- Allow simpler hunting access on the Rock Creek Cattle Ranch for general license opportunity and 002-00 opportunity.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

The success of this proposal will be measured by:

- Simplified hunting regulations and more effective wildlife management implementation
- Satisfaction with hunters and landowners

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

The following maps display elk distribution on winter range of March 2019, as well as current hunting district boundaries and proposed changes to boundaries. Elk are approaching objective in HDs 217, 213, and 212, and are projected to be within objective after hunting season in 2020-2021.

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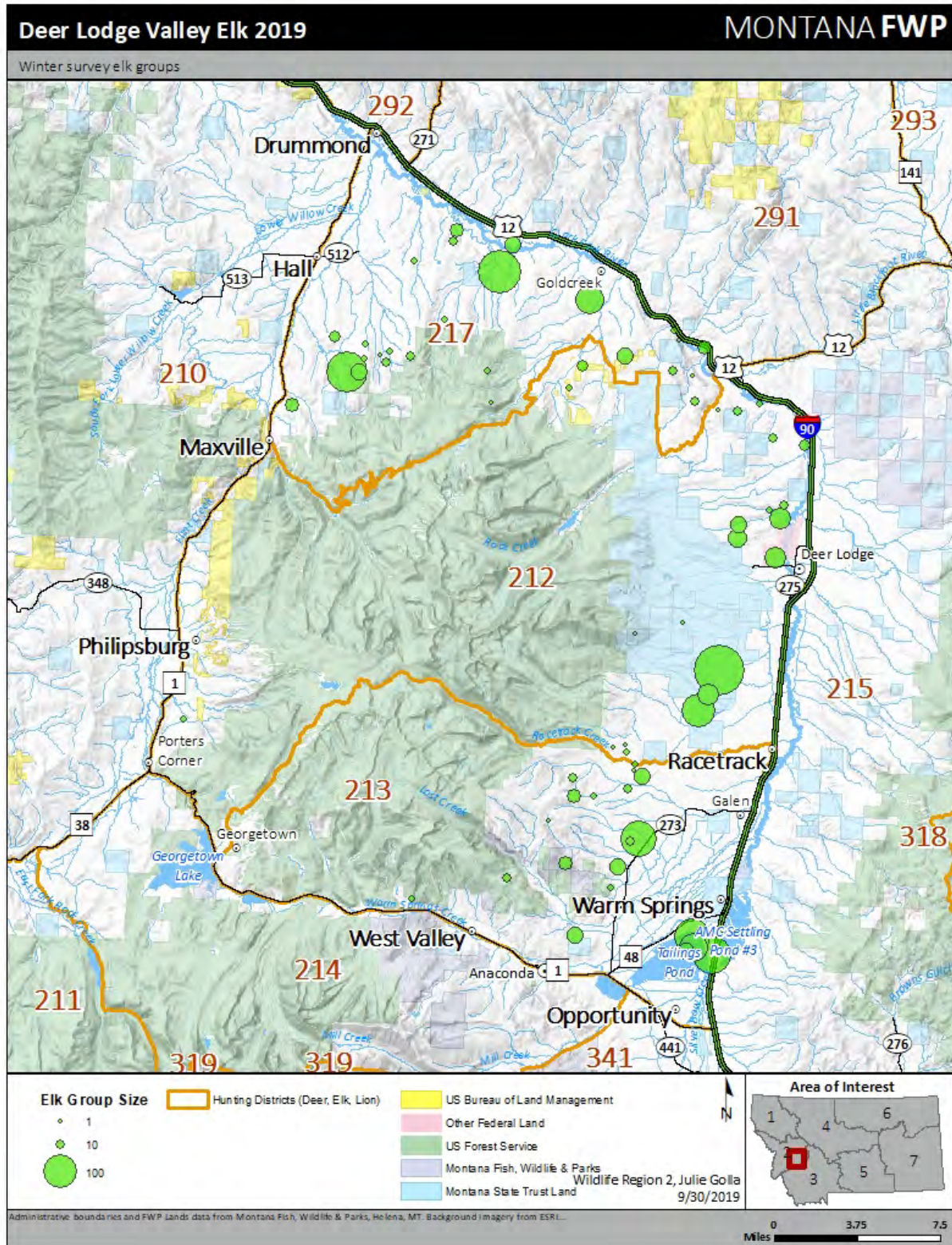


Figure 1. Elk distribution and group size in March 2019 during winter elk surveys.

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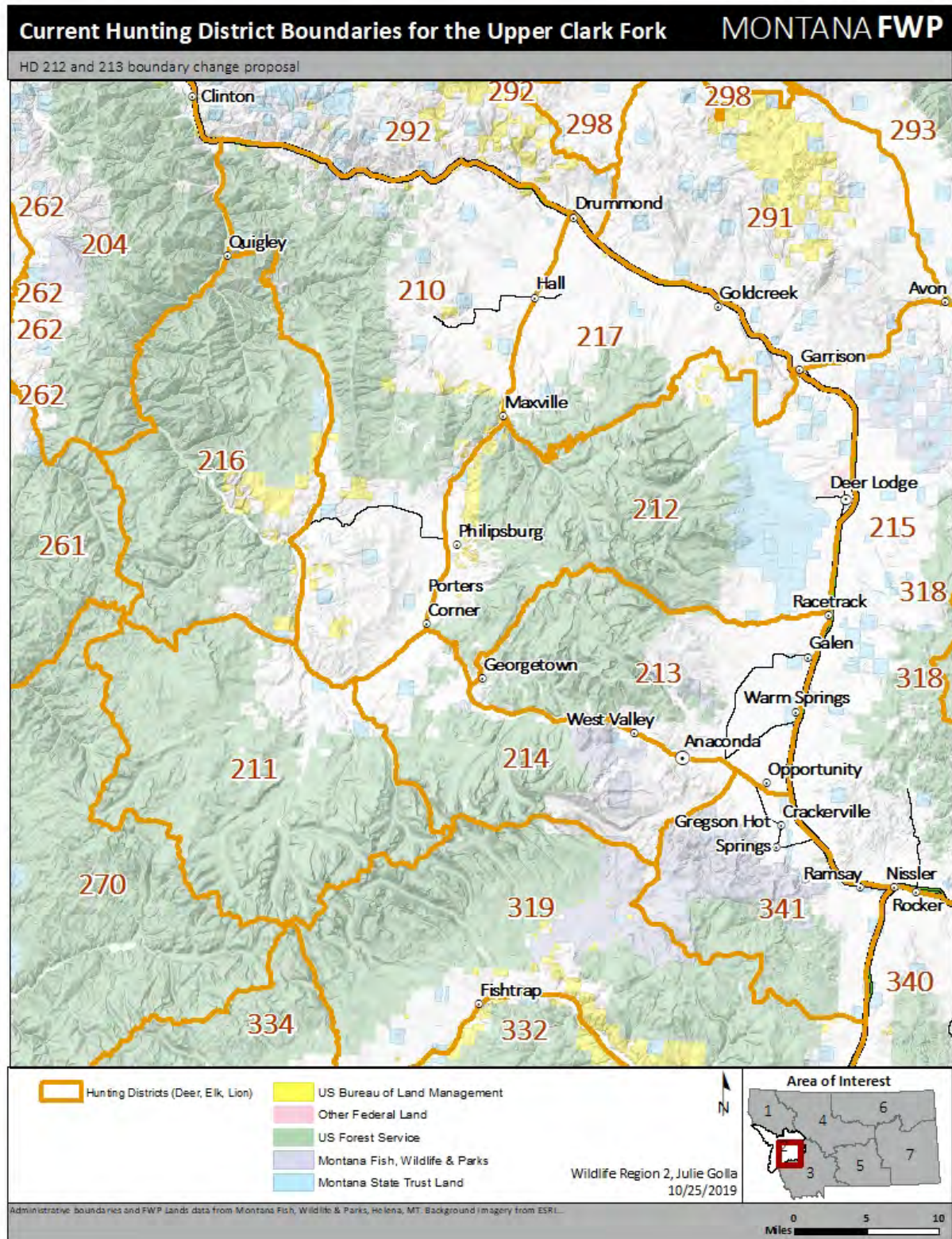


Figure 2. Current hunting district boundaries in the Upper Clark Fork.

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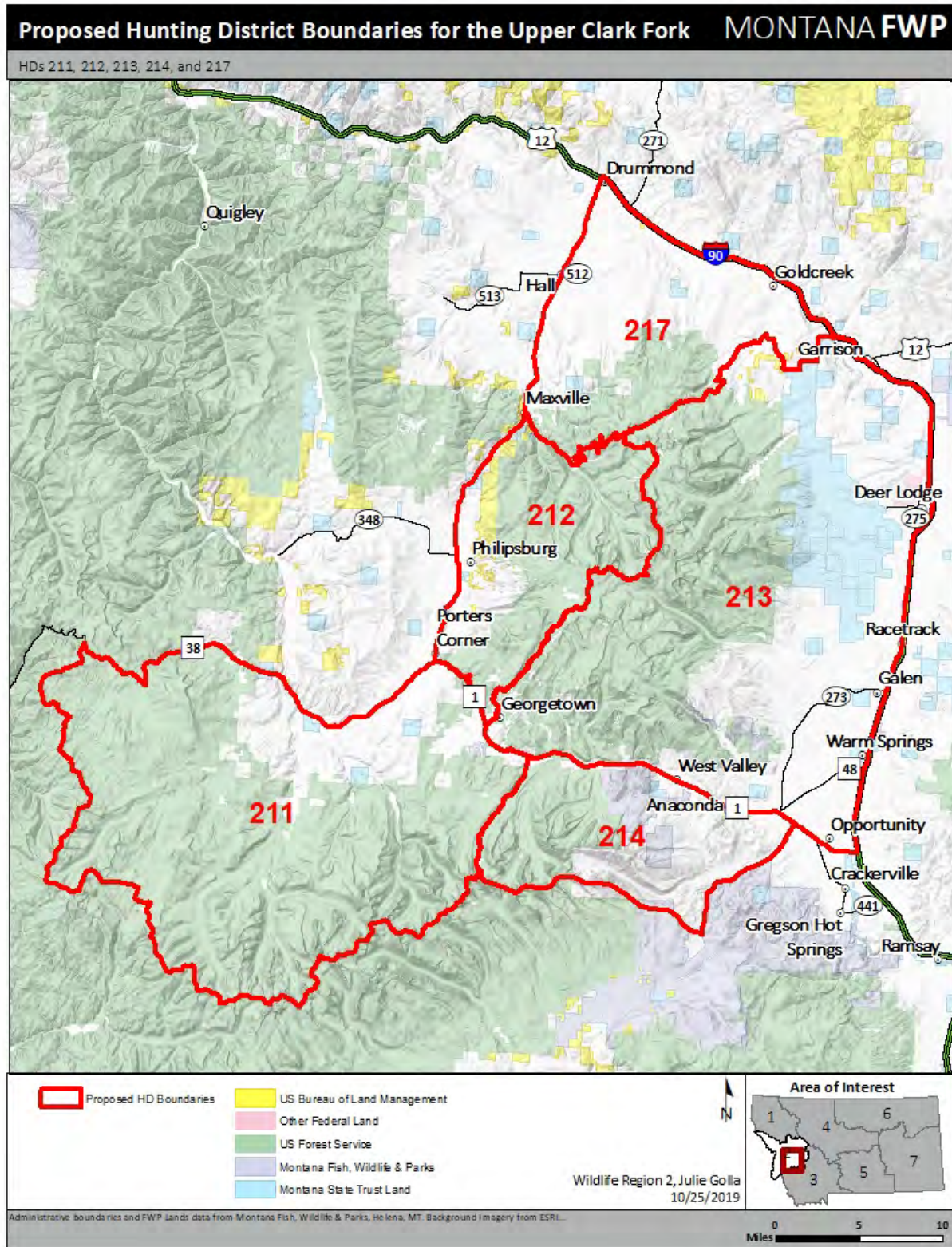


Figure 3. All proposed hunting district boundary changes for 2020 in the Upper Clark Fork. Note the 213 and 217 change near Garrison.

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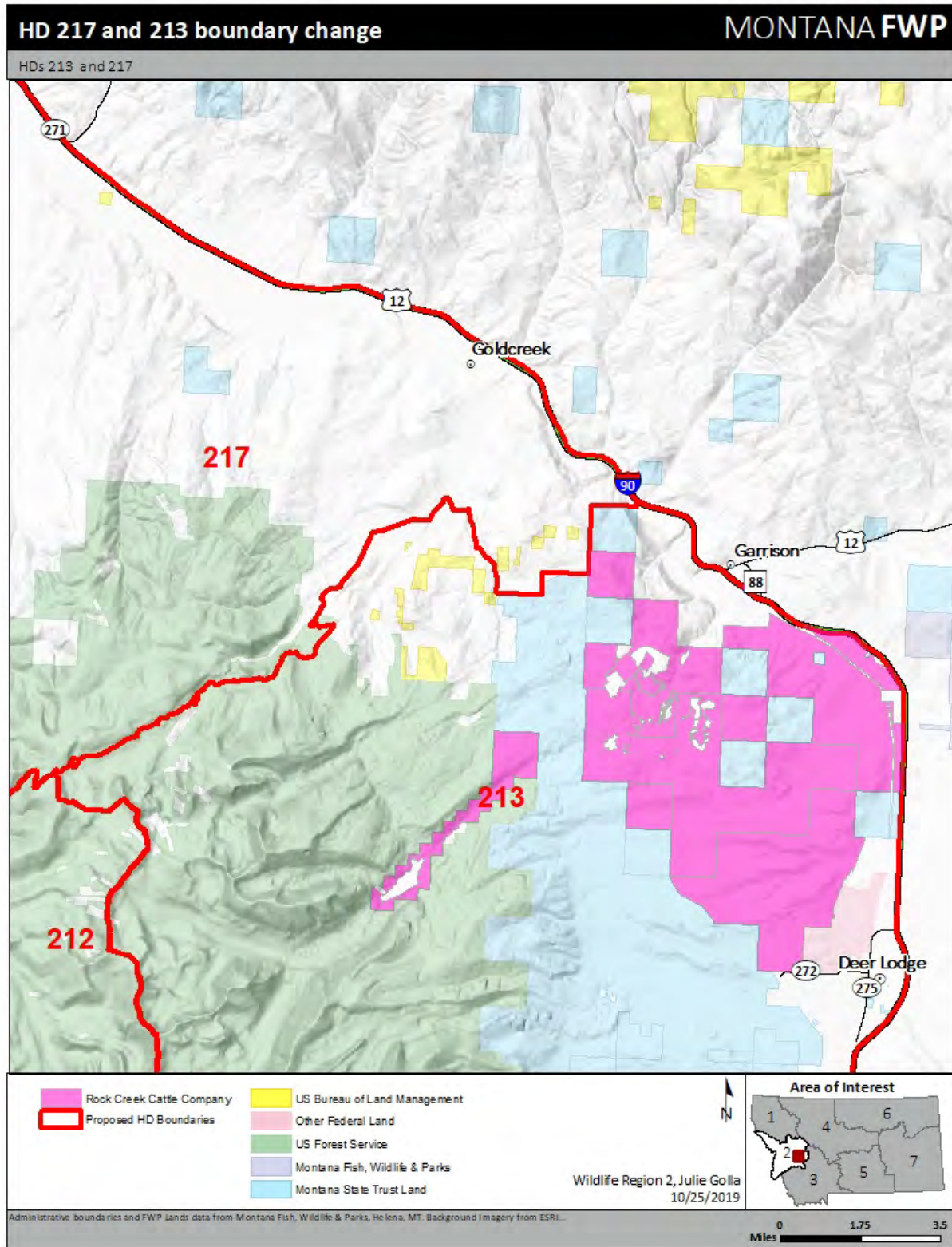


Figure 4. A zoomed in view of the proposed boundary change for HD 213 and HD 217. A large landowner, Rock Creek Cattle, and elk management in the area will benefit from this simplified boundary which will include all of the ranch in HD 213.

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- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

This boundary change will improve private land hunting access to elk and deer for HD 213 by using a boundary that more closely matches property ownership and simplifies hunting regulations by including landowners in one hunting district instead of two with very different elk hunting regulations.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

Local landowners near the border area of HD 213 and 217 are in support of a simplified hunting district boundary. FWP game wardens and the biologist also agree that this boundary will simplify hunting access and wildlife management for elk and deer in the Gold Creek and Rock Creek area.

Sportsmen who work to get permission to hunt on Rock Creek Cattle Company's property will have one hunting district's elk regulations to follow, as opposed to two districts that have very different general license and permit opportunities. Rock Creek Cattle outfits and charges fees for brow-tined-bull hunts on their property. However, the ranch has been a helpful participant in boosting antlerless harvest by providing access free of charge for vetted antlerless elk hunters. FWP game wardens have been building this relationship, and elk management for HD 213 will be much more effective if FWP can maintain productive hunting opportunities on Rock Creek Cattle Company's land.

Submitted by: Julie Golla

Date: November 13, 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Elk/Deer

Region: 4

Hunting District: Deer/Elk Hunting Districts 404/444/421

Year: 2020/21 seasons

- 1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

Modify the common hunting district (HD) boundary shared by HDs 404, 444 and 421 in order to better reflect deer/elk distribution, subsequent hunter opportunity and associated management types.

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

The objective of this proposed change is to improve hunting management scenarios in this specific area to better reflect current deer/elk distribution and habitat use along with some pertinent landowner types specific to this area. For example, the addition to be added specific to HD 444 (taking away from HD 404 – Figure 1), will as much as anything, help better manage WT deer along the Sun River corridor specific to that area. Current WT deer populations in that area are at or near all time highs based on recent survey data and modifying this boundary as proposed will help further liberalize antlerless WT deer hunting opportunity (additional existing B license already valid in HD 444). In addition, the proposed addition to HD 421 (taking away from HD 404 – Figure 1), will also improve the ability to manage elk/deer given the existing hunter use of this area and landownerships. Hunters that use that area between Hwy 200 and Interstate 15 are believed to generally be the same individuals across much of that landscape. Adding this proposed addition to HD 421 will allow for less confusion of having an arbitrary county road designation (Simms-Cascade cut across road) boundary as it currently stands.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

Success of this proposal will be measured primarily by hunter and landowner comments about consistent hunting regulations across this landscape as well as improved harvest success (HD 444 addition).

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

The only elk present in this general area are in the HD 421 area and as of most current survey data (winter 2018/2019), are approximately 20% over objective and as such, are also included in shoulder season hunting types. The current general season elk hunting opportunity (archery/rifle) is the same for HDs 404 and 421. Although this proposed addition to this HD will certainly add a large area for increased opportunity for elk hunting during the current shoulder seasons, given elk distribution, it is unlikely to add much (if any) real opportunity given elk presence further west.

Boundary Change Justifications December 2019

As previously noted, and at least for the HD 444 area, WT deer numbers are at or near all-time recorded high levels. Liberalization of hunting season types to any degree should draw strong support, especially in the Sun River valley area. Although no formal mule deer surveys are completed specific to these areas, it is believed that overall numbers are within at least recent historic average range. The current deer hunting season types (mule and WT deer) on a general deer license are also consistent between all these HDs – either-sex/either-species – so the transition to these proposed boundary adjustments should not draw much, if any, confusion.

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

General hunting access opportunities in this area are considered relatively good. For resident and non-resident hunters alike, there are scattered small amounts of state DNRC lands available along with new and long-standing block management areas. Private land access is variable, but certainly is there for hunters to inquire. The area consists primarily of a mix of private land agricultural ground (wheat/barley production), native/mixed introduced grassland types (public/private) and riparian habitat. From a big game perspective, this area is generally noted more for deer and antelope production.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

Most contacts to date have focused on this change specific to the HD 444 addition given the strong desire for landowners in this area to have more opportunity to harvest antlerless WT deer in this area. This proposal will certainly create this opportunity. This proposal was brought forward at the most recent Upper Sun Wildlife Team meeting in Fairfield and no comments were made against the proposed change.

Submitted by: Brent Lonner
Date: October 26, 2019

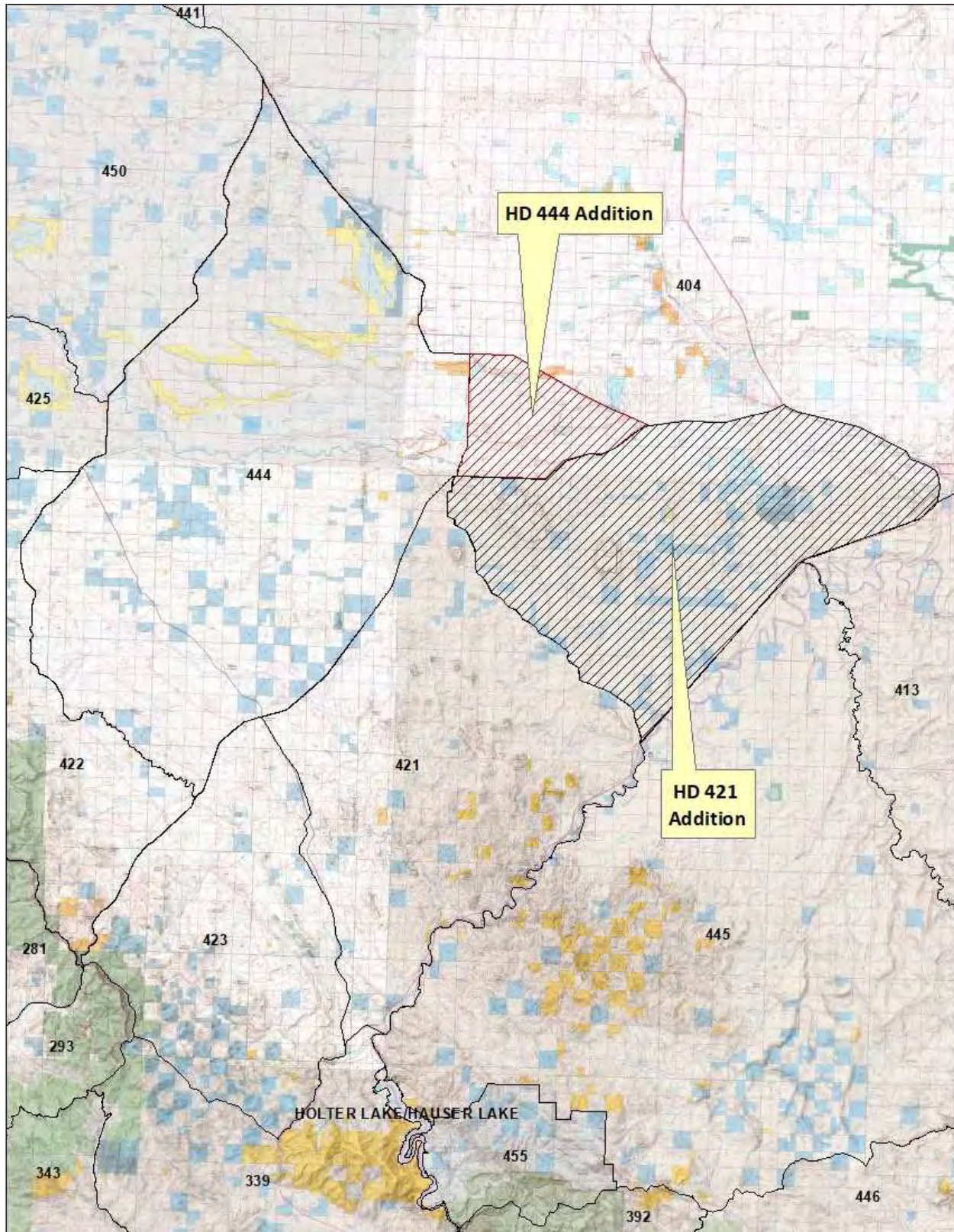
Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

Boundary Change Justifications December 2019

Figure 1. Proposed boundary adjustments between HDs 444, 404 and 421. The two additions noted would be coming out of HD 404.



Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE AND PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

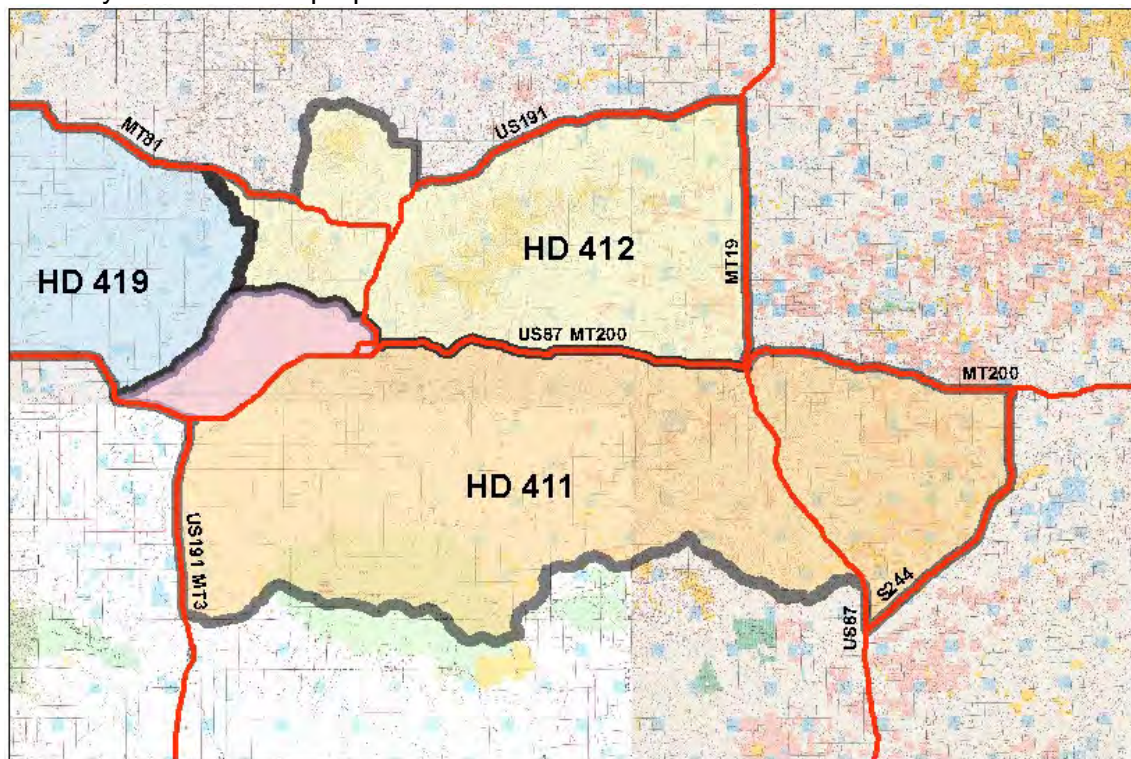
Species: Elk
Region: 4
Hunting District: 411, 412
Year: 2020-2021

1. Describe the proposed season / quota changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.). **REMEMBER THIS STEP IS TO BE ACCOMPLISHED BY THE INITIAL ENTRY INTO THE DATABASE—SO FOLKS CAN START THIS NARRATIVE WITH #2 BELOW.**

For the upcoming 2020-21 hunting seasons:

- Change the boundaries of HDs 411 and 412 such that the portion of 411 north of US Hwy 87/191 MT HWY 200 and south/east of the Judith River, south of Hanover Road, and west of US Hwy 191 becomes a portion of HD 412.

Figure 1. Map of the proposed boundary change between HDs 411 and 412: The pink portion is currently HD 411 but is proposed to become HD 412.



Legend

- HD 411/412 boundary change
- HD 411 boundary
- HD 412 boundary
- HD 419 boundary

10 5 0 10 Miles



Boundary Change Justifications December 2019

Modifications to the 2020-21 Montana Deer/Elk/Lion Legal Descriptions would read (changes highlighted in RED):

411 Snowy Mountains: Those portions of Golden Valley, Fergus, and Judith Basin Counties lying within the following-described boundary: Beginning at Lewistown, then east on State Highway 200 to Winnett, then southwesterly on the Winnett to Roundup Road (FAS244) to its junction with US Highway 87, then north on said highway approximately four miles to Flat Willow Creek, then westerly up said creek to the South Fork of Flat Willow Creek, then westerly up said creek to Red Hill Road, then south along said road to the Snowy Mountain Divide, then westerly along said divide to the head of Meadow Creek, then westerly down said creek to US Highway 191, then northerly along said highway to US Highway 87, then ~~westerly along said highway to the Judith River, then northerly down said river to the Hanover Road, then easterly along said road to US Highway 191, then southerly easterly~~ on said highway to Lewistown, the point of beginning.

412 Judith and Moccasin Mountains: That portion of Fergus County lying within the following-described boundary: Beginning at Lewistown, then easterly along US Highway 87 (State Route 200), to its junction with State Highway 19 at Grass Range, then north along said highway to its junction with US Highway 191 at Bohemian Corner, then westerly along US Highway 191 to Hilger, then north on the Winifred Road (FAS236) approximately three miles to the junction of Salt Creek Road, then northwesterly along said road to the Plum Creek Road, then southwesterly along said road to State Route 81, then westerly along said route to the Judith River, then southerly along said river to ~~the Hanover Road (FAS 426), then easterly along said road to US Highway 191, then southerly along said highway to~~ US Highway 87, then easterly along said Highway to ~~at~~ Lewistown, the point of beginning.

2. **What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

The objective of this proposed change is to simplify the legal descriptions of HDs 411 and 412, and incorporate a portion of HD 411, that is separated from the rest of the district by a major highway, into HD 412. The result will be a more obvious dividing line between both districts.

3. **How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

There are no real metrics of success associated with this proposal. It is more of a "housekeeping" proposal.

4. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, temperature/precipitation information).**

NA

5. **Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

Boundary Change Justifications December 2019

Wildlife and enforcement staff discussed this proposal and agree that it makes sense to move the north/south boundary lines of HDs 411 and 412 to the major highway that divides them, rather than only having a portion of that highway act as a boundary. Because deer and elk are managed similarly in both districts, and they both fall within the same lion hunting zone, the proposal will have minimal impact on management or hunting opportunity for any of these species.

Submitted by: Sonja Andersen/October 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Deer/Elk

Region: 4

Hunting District: 452, 449

Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

Current Deer/Elk HDs 452 and 449 are two relatively small hunting districts covering the eastern and western portions of the Castle Mountains east of White Sulphur Springs. These two hunting districts have been surveyed for elk as a single unit for years and those data are analyzed and presented together. The two HDs share a single Elk Plan management objective and regulations for the two current HDs are identical.

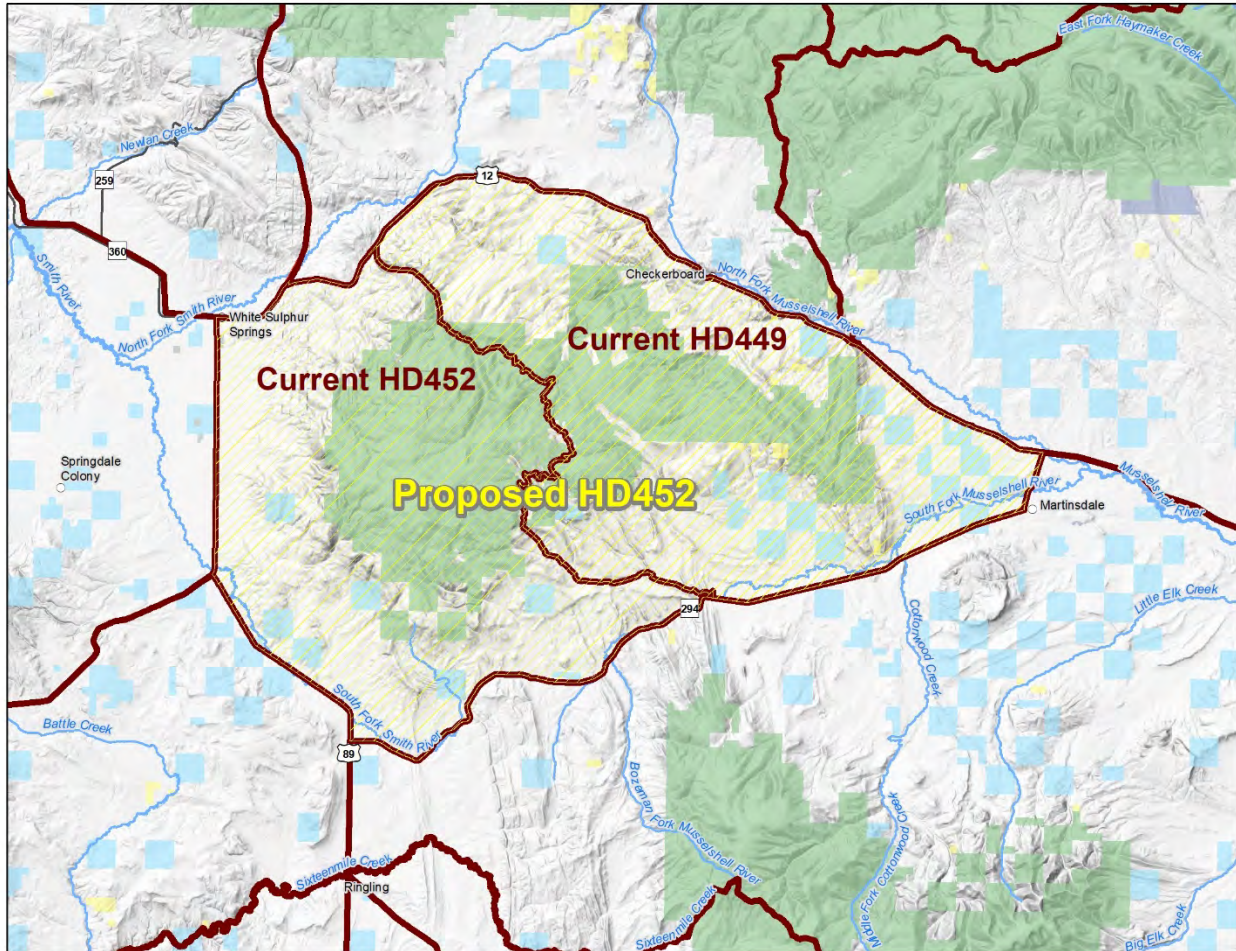
This proposal would eliminate current HD449 by combining the two Castle Mountains HDs into a single HD452.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

This change would serve to simplify the deer, elk, and lion regulations by eliminating an unnecessary hunting district, leaving a single HD covering the Castle Mountains EMU.

Boundary Change Justifications

December 2019



3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

This change will simplify the collection, storage, and presentation of survey and harvest data as well as eliminating an unnecessary hunting district from the hunting regulations. Hunter harvest opportunity and game damage response would be unaffected by this proposed change.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Elk are currently above Elk Plan objective within the Castle Mountains EMU, which is comprised of current HDs 449 and 452.

5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

Hunting regulations within the two current Castle Mountains D/E HDs have been identical for many years and R4 foresees no future need to manage the eastern and western portions of the mountain range differently going forward.

Boundary Change Justifications December 2019

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

This proposal will be vetted with the public during the upcoming 2019/20 season setting process.

Legal description

That portion of Meagher County lying within the following-described boundary: Beginning at the intersection of US Highways 89 and 12 northeast of White Sulphur Springs, then easterly on US Highway 12 to its intersection with Route 294 north of Martinsdale, then southwesterly along said route to its intersection with US Highway 89 north of Ringling, then northerly along said highway through White Sulphur Springs to its intersection with US Highway 12, the point of beginning.

Submitted by: Jay Kolbe

Date: 10/20/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Mountain Lion

Region: 5

Hunting District: 500, 502, 530, 570, 575, 590

Year: 2020

- 1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

The Montana Mountain Lion Monitoring and Management Strategy defines the Region 5 Eastern Ecoregion as Deer/Elk HDs 500, 502, 530, 570, 575 and 590. These HDs are primarily made up of private land. The lion management strategy in these HDs is have season types that maximize private landowner's flexibility to manage lions on their property. As such lions in each of these HDs have long been managed with a liberal quota and no female sub-quota.

The Montana Mountain Lion Monitoring and Management Strategy raises the possibility of simplifying lion season structure by managing on an ecoregion basis. This proposal simplifies regulations by combining HDs 500, 502, 530, 570, 575 and 590 into one management unit with a single lion harvest quota for the entire R5 Eastern Ecoregion.

Boundary Change Justifications December 2019

Change From:

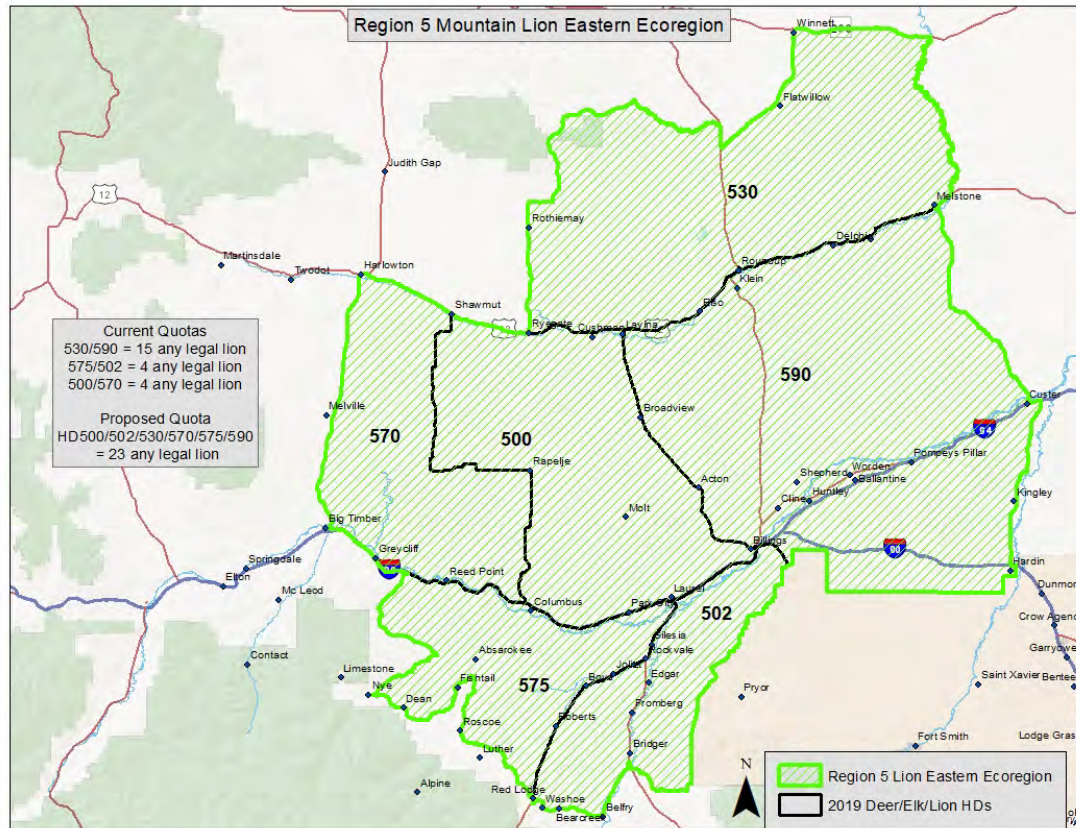
Harvest Quota

	Any Legal Lion	Female Sub-quota
HDs 500 & 570		
Dec 01 – Apr 14	4	-
Combined Archery and Fall		
Sept 6-Oct 19 and Oct 19 – Nov 29	1	-
HDs 502 & 575		
Dec 01 – Apr 14	4	-
Combined Archery and Fall		
Sept 6-Oct 19 and Oct 19 – Nov 29	1	-
HDs 530 & 590		
Dec 01 – Apr 14	15	-
Combined Archery and Fall		
Sept 6-Oct 19 and Oct 19 – Nov 29	3	-

Change To:

	Harvest Quota Any Legal Lion	Female Sub-quota
HDs 500, 502, 530, 570, 575, 590		
Dec 01 – Apr 14	23	-
Combined Archery and Fall		
Sept 6-Oct 19 and Oct 19 – Nov 29	5	-

Boundary Change Justifications December 2019



Season structure and harvest trends are shown in the following tables:

Table 1. Hunting District 500/570 lion harvest, 1996-2018

Year	Quota		Harvest		Date Season Closed		Ages	
	Total	Female	Male	Female	Female	Total	Male	Female
96/97	3	None	1	1	NA	Feb 15	2	?
97/98	3	None	1	1	NA	Feb 15	2	2
98/99	3	None	0	0	NA	Apr 14		
99/00	3	None	1	3	NA	Feb 15	2	4,?,?
00/01	3	None	0	1	NA	Apr 14		2
01/02	4	None	0	1	NA	Apr 14		3
02/03	4	None	1	0	NA	Apr 14	?	

Boundary Change Justifications December 2019

03/04	4	None	1	0	NA	Apr 14	2	
04/05	4	None	0	0	NA	Apr 14		
05/06	4	None	0	0	NA	Apr 14		
06/07	4	None	0	0	NA	Apr 14		
07/08	4	None	0	0	NA	Apr 14		
08/09	4	None	0	0	NA	Apr 14		
09/10	4	None	0	0	NA	Apr 14		
10/11	4	None	0	0	NA	Apr 14		
11/12	4	None	3	1	NA	Jan 30	3,3,5	?
12/13	4	None	2	1	NA	Apr 14	3,4	3
13/14	4	None	0	1	NA	Apr 14		?
14/15	4	None	1	1	NA	Apr 14	2	6
15/16	4	None	0	1	NA	Apr 14		1
16/17	4	None	3	1	NA	Mar 13	1,1,3	3
17/18	4	None	0	0	NA	Apr 14		
18/19	4	None	2	1	NA	Apr 14	3,4	5

Table 2. Hunting District 502/575 lion harvest, 1996-2018

Year	Quota		Harvest		Date Season Closed		Ages	
	Total	Female	Male	Female	Female	Total	Male	Female
96/97	4	None	2	1	NA	Feb 15	2,3	6
97/98	4	None	1	3	NA	Jan 13	3	1,5,9
98/99	4	None	1	3	NA	Jan 29	2	1,2,5
99/00	4	None	1	2	NA	Apr 14	1	2,2
00/01	4	None	2	2	NA	Feb 10	2,3	1,2
01/02	4	None	0	3	NA	Apr 14		2,2,9
02/03	4	None	1	2	NA	Apr 14	3	2,2
03/04	4	None	1	0	NA	Apr 14	2	
04/05	4	None	3	1	NA	Jan 19	1,2,4	1
05/06	4	None	1	0	NA	Apr 14	?	
06/07	4	None	0	0	NA	Apr 14		
07/08	4	None	1	1	NA	Apr 14	1	3
08/09	4	None	2	1	NA	Apr 14	2,3	2
09/10	4	None	0	3	NA	Apr 14		1,2,3
10/11	4	None	1	0	NA	Apr 14	4	
11/12	4	None	1	0	NA	Apr 14	1	
12/13	4	None	2	0	NA	Apr 14	2,4	
13/14	4	None	0	1	NA	Apr 14		3
14/15	4	None	2	0	NA	Apr 14	2,3	
15/16	4	None	0	0	NA	Apr 14		
16/17	4	None	1	0	NA	Apr 14	?	
17/18	4	None	1	0	NA	Apr 14	?	
18/19	4	None	3	1	NA	Jan 29	2,2,4	3

Table 3. Hunting District 530/590 lion harvest, 1996-2018

Year	Quota		Harvest		Date Season Closed		Ages	
	Total	Female	Male	Female	Female	Total	Male	Female
96/97	3	None	0	0	NA	Feb 15		
97/98	3	None	1	2	NA	Jan 15	6	1,1
98/99	5	None	1	1	NA	Apr 14	2	1
99/00	5	None	3	1	NA	Apr 14	2,3,?	3
00/01	5	None	1	1	NA	Apr 14	6	3
01/02	5	None	1	2	NA	Apr 14	C	1,3
02/03	5	None	1	0	NA	Apr 14	?	
03/04	5	None	0	1	NA	Apr 14		3

Boundary Change Justifications December 2019

04/05	5	None	1	3	NA	Apr 14	2	1,4,?
05/06	5	None	1	0	NA	Apr 14	?	
06/07	5	None	3	1	NA	Apr 14	1,2,2	3
07/08	5	None	2	0	NA	Apr 14	2,2	
08/09	5	None	3	0	NA	Apr 14	1,2,3	
09/10	5	None	4	1	NA	Apr 14	2,5,?,?	2
10/11	5	None	0	0	NA	Apr 14		
11/12	5	None	2	3	NA	Dec 10	2,?	1,1,2
12/13	5	None	3	2	NA	Feb 23	2,3,6	3,5
13/14	5	None	4	3	NA	Feb 1	3,4,5,?	1,2,?
14/15	8	None	4	1	NA	Apr 14	1,2,?,?	9
15/16	8	None	1	0	NA	Apr 14	4	
16/17	8	None	2	3	NA	Apr 14	2,4	1,1,3
17/18	8	None	3	5	NA	Jan 17	1,2,5	1,1,2,8,?
18/19	10	None	4	7	NA	Jan 27	2,4,5,5	2,2,3,4,4,5,7

2. Why is the proposed change necessary?

This change is proposed to simplify lion regulations in the R5 lion Eastern Ecoregion.

3. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective is to simplify harvest regulations, while maintaining a stable mountain lion across the R5 lion Eastern Ecoregion.

4. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Lion population trends will continue to be monitored through analysis of lion harvest data.

5. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Harvest rates (Dec 1 – Feb 15) are the best indicator available for long term lion population trends as depicted in the following charts:

Boundary Change Justifications

December 2019

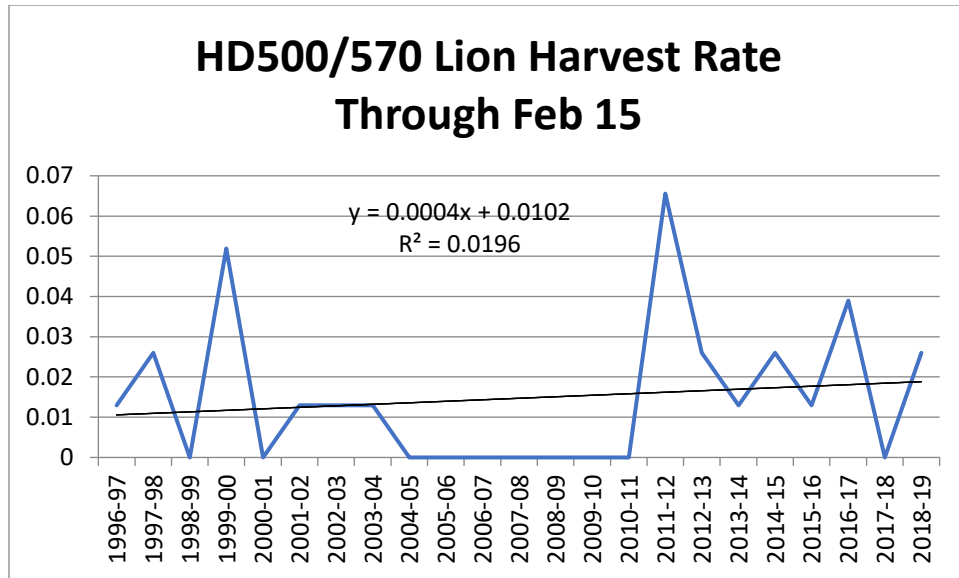


Figure 1. Lions harvested per day in HD 500/570 from December 1 through February 15, 1996-2018

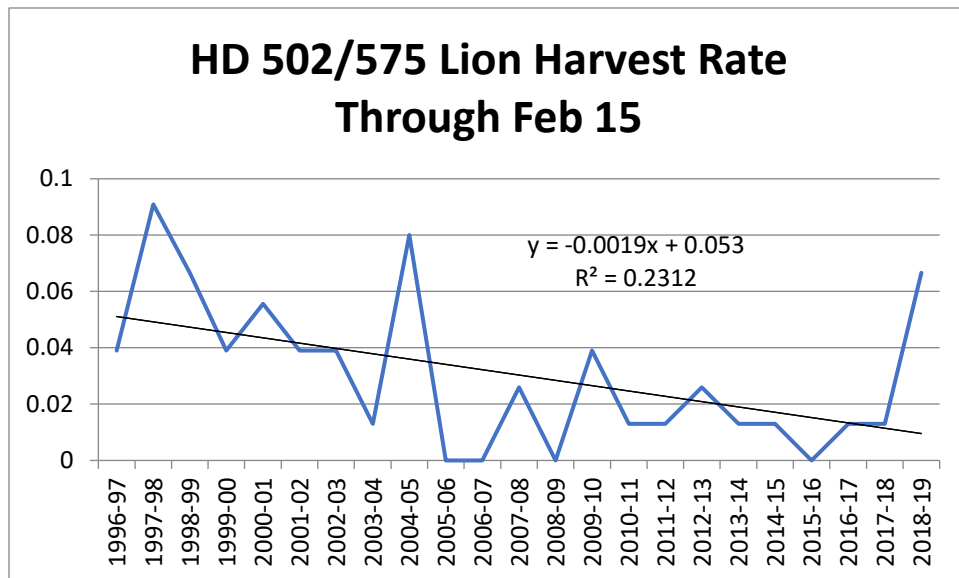
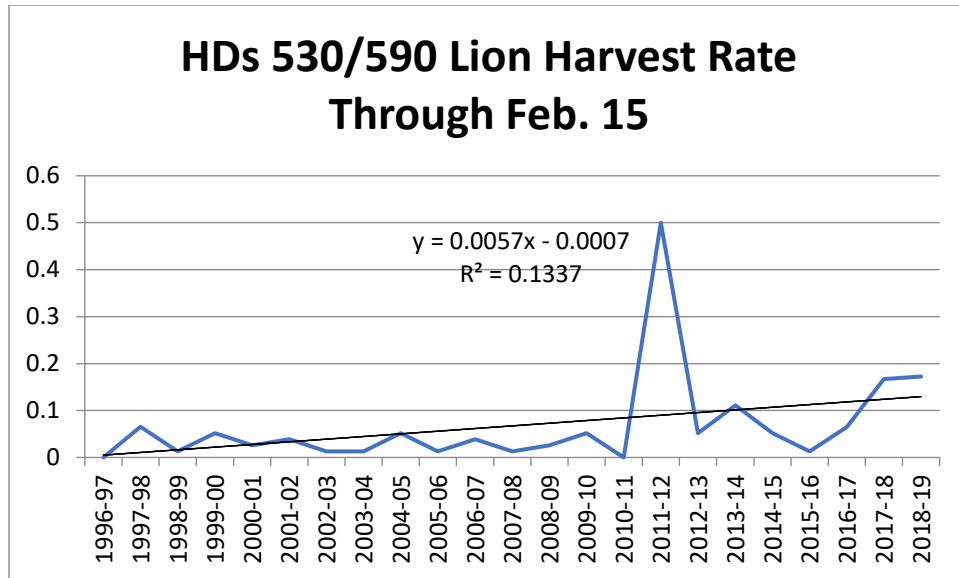


Figure 2. Lions harvested per day in HD 502/575 from December 1 through February 15, 1996-2018

Boundary Change Justifications December 2019



. Figure 3. Lions harvested per day in HD 530/590 from December 1 through February 15, 1996-2018

For the R5 Eastern Ecoregion harvest rates are generally stable over time with slight increase in some portions of the ecoregion offset by slight decreases in other portions. The harvest objective is to maintain this stable trend.

6. How will this proposal influence this population status?

This proposal is being made to simplify regulations rather than to change the level of influence on population status.

7. Provide information related to any weather/habitat factors that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

- 1) Utilization transect information: None
- 2) Snow condition survey information: None
- 3) Describe access problems related to change, etc.
Access will generally remain stable.
- 4) Overwinter survival information (i.e. bad winter lost what % of population): None

8. Provide information relative to impacts to resident hunters, nonresident hunters and public & private land use.

Boundary Change Justifications December 2019

Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

1) List specific sports groups or landowners:

This proposal has generally not been discussed with local lion hunters or landowners.

2) Indicate if proposal was recommended by public - is it in response to a concern by sportspersons:

The proposal is in response to internal and external requests for simpler regulations

Submitted by: Shawn T. Stewart

Date: October 10, 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Deer/Elk

Region: 6

Hunting District: 670

Year: 2020-2021

- 1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

This proposal aims to consolidate HD's 611 and parts of HD 670 into one hunting district (670). More specifically, the proposal is to add all of the HD 611 from Harlem-Turner Road (Route 241) into HD 670 all the way to the new eastern boundary of HD 670, HWY 24, and move the southern boundary to be Highway 2, thus eliminating HD 611 and associated LPT's (Fig 1). Currently HD 611 is a general hunting district for deer and elk and is part of the current 600 Antelope HD. Note: An antelope HD change is also proposed so that deer, elk and antelope Hunting District 670 will be the same.

Boundary Change Justifications

December 2019

Historically the only LPT that was directly tied to the HD 611 was the antlerless MD license (611-01) with a moderate quota of currently 500 and a range 50—500. HD 670 historically has a higher mule deer population and a higher LPT quota annually (currently 1000, range 200—2000).

Legal Description for proposed NEW HD 670 (Figure 1) and proposed quota and quota range:

Those portions of Blaine, Phillips, and Valley counties lying within the following-described boundary:

Beginning at a point where the Harlem-Turner Road (Route 241) joins the Canadian line, then southerly along said road to US Highway 2 at Harlem, then east and south along said highway to the Milk River Bridge at the Fort Belknap Indian Agency, then easterly along the Milk River to the Milk River Bridge on US Highway 2 west of Dodson, then easterly along said Highway to Nashua, then northerly along Porcupine Creek to the West Fork of Porcupine Creek, then northerly along said creek until the north boundary of the Fort Peck Indian Reservation, then easterly along said boundary until MT Highway 24, then northerly along said highway to the Canadian border, and then westerly until Harlem-Turner Road (Route 241), the point of beginning.

- Mule Deer B-License: Range 100-3,000, Proposed Quota 1,500

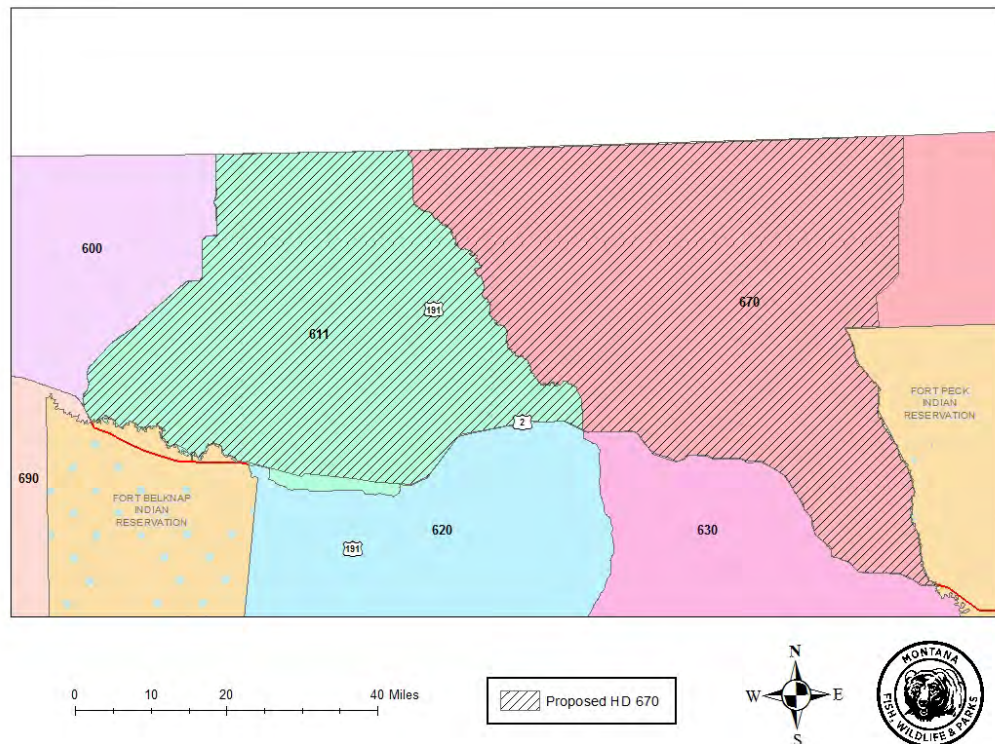


Figure 1. Current hunting districts relative to the proposed HD 670.

Boundary Change Justifications December 2019

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

The overall objective is simplification of the HD's and boundaries and to reduce the number of Hunting Districts and LPT's in Region 6. Because HD 611 is a HD with only one LPT and has similar habitat and landownership to the western half of HD the consolidation and boundary change will create a more uniform HD and result in one less HD and LPT. There is no reason to have this HD in the region as a standalone and will be much simpler when consolidated with HD 670 to become one large HD.

Also, with the boundary change moving from the Milk River between Dodson and Malta to Highway 2 between those two towns the proposed change will make a cleaner line and the new HD will encompass everything north of the highway outside of the reservations.

With this change, the objective will continue to be to manage mule deer populations within the range of 20% above and 30% below the long-term average LTA as stated under Mule Deer AHM (2001). The Hunting Districts included in this B-license proposal are currently above this range so providing additional antlerless harvest is needed as a deer management tool.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

Because the goal will be to consolidate and adjust boundaries, the B-license quotas and quota ranges for the proposed HD will reflect the current HD 611 and portion of HD 670 and quotas will also reflect what the assumed hunting pressure and harvest is in that area.

Trends in mule deer populations are monitored by completing post-season and spring aerial surveys on one mule deer trend areas in the proposed HD 670. Total number of mule deer observed, as well as fawn ratios from these surveys, are measured against population objectives within AHM to determine population status and trend of mule deer across the region as well as within hunting districts. Success of this proposal will be measured by the continual monitoring of the above parameters within HDs included in this proposal. Secondly, harvest surveys provide harvest estimates across the region as well as by HD. Mule deer harvest estimates provide another measure of population level and availability of mule deer for harvest, as well as prior year removal from the population and effectiveness of the proposed B-licenses types.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

Boundary Change Justifications December 2019

There are currently two deer trend areas flown annually during a post season and spring green up flights and their respective data are below.

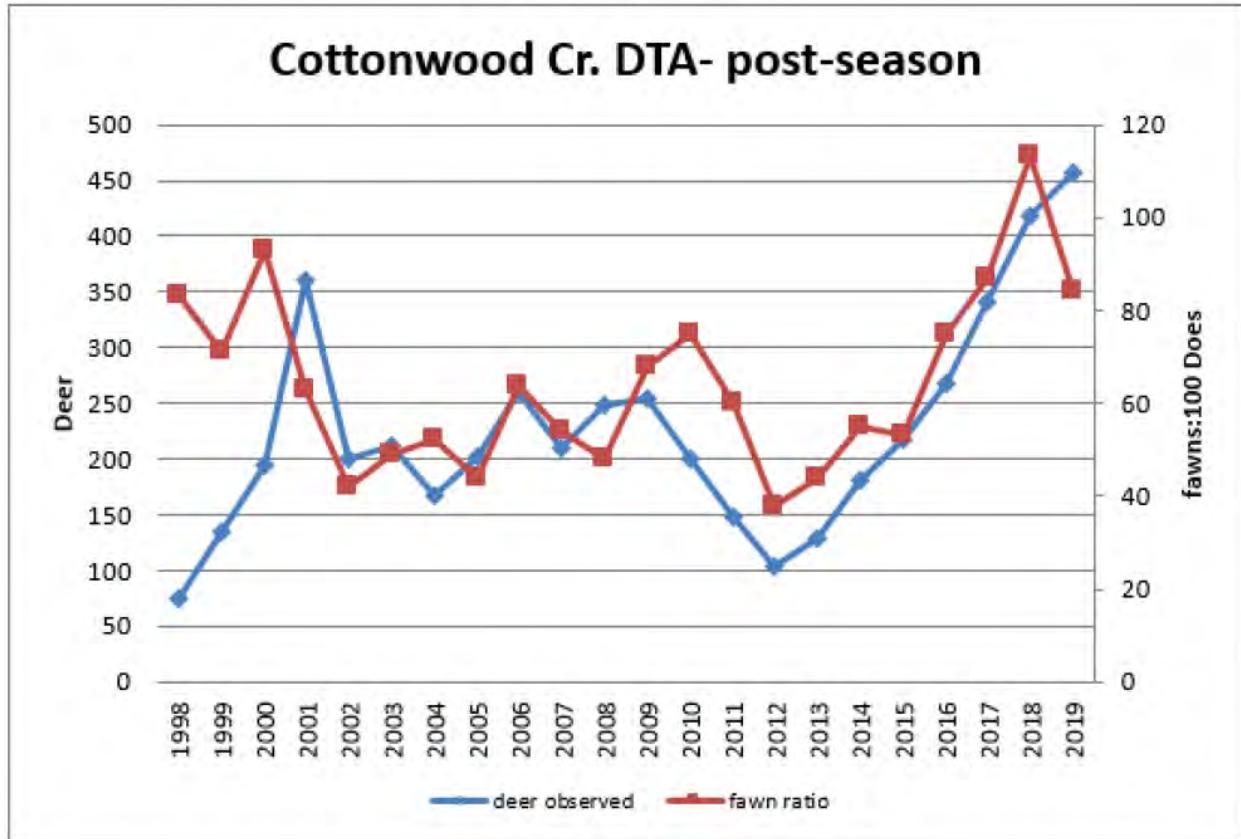


Figure 2. Region 6 Spring Mule deer trend on Cottonwood Cr DTA (HD 611), 1998-2019.

During post Season surveys, total deer numbers are 68% above long-term post season average. Fawn ratios were well above average with a ratio of 84:100 does, up 38% from the LTA. Buck ratios 30 bucks: 100 does is right at LTA. Total deer numbers during the spring green up surveys are 74% above long-term spring average. Fawn ratios were near average with a ratio of 49:100 adults, down 2% from the LTA. Population metrics within the proposed HD are within the ranges of the standard and liberal mule deer regulation packages as defined by Mule Deer AHM (2001), which is either-sex mule deer during the archery and general seasons, with liberal numbers of B-licenses.

Boundary Change Justifications December 2019

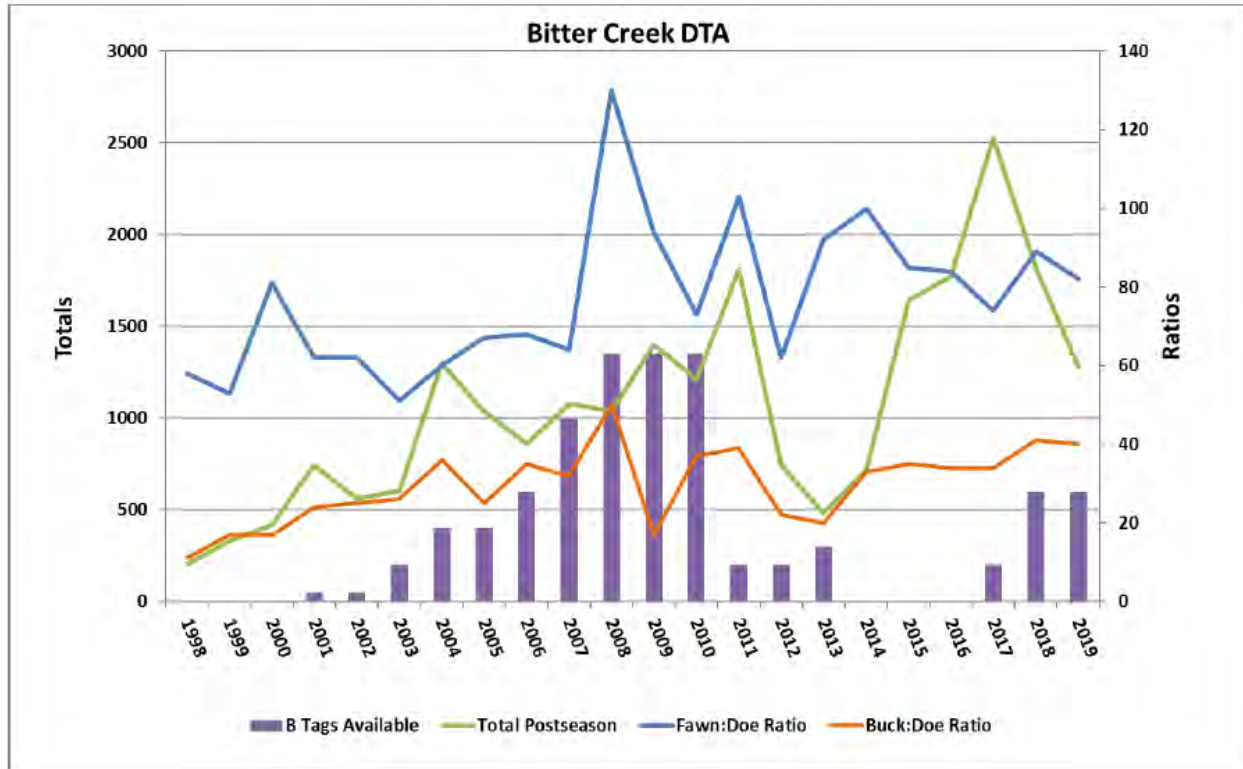


Figure 3. Region 6 Spring Mule deer trend on Bitter Cr DTA (HD 670), 1998-2019.

During post Season surveys, total deer numbers are 30% above long-term post season average. Fawn ratios were well above average with a ratio of 82:100 does, up 14% from the LTA. Buck ratios 40 bucks: 100 does was 48% above LTA. Total deer numbers during the spring green up surveys are 12% above long-term spring average. Fawn ratios were slightly below average with a ratio of 49:100 adults, down 14% from the LTA. Both population metrics within the proposed HD are within the range of the standard mule deer regulation packages as defined by Mule Deer AHM (2001), which is either-sex mule deer during the archery and general seasons, with moderate numbers of B-licenses.

5. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

This change will help with the state and regional goal to simplify regulations and HD's within the region. The agreement is that there are too many HD's in the region and the eliminating and consolidating HD's is the goal of the Management Biologists and Game Wardens. This consolidation will eliminate one hunting district and one LPT, working towards the simplification process. This also allows

Boundary Change Justifications December 2019

hunters more freedom and a larger area to locate mule deer across a mixture of private and public lands throughout the larger HD.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

There is a growing frustration with current regulations, the number of LPT's and number of HD's. A reoccurring concern is the number of hunting districts in an area of a region that is managed as general hunting districts for deer and elk. Some public has also expressed the desire to have more freedom to go "where the deer are" and consolidating the 2 HD's and expanding the boundaries will allow more freedom to access public lands and more deer herds on one LPT.

With the concern of Chronic Wasting Disease and the goal to manage the disease through population management is another priority in the region. Much of the public understands that maintaining lower deer densities and concentrating harvest on areas of higher deer densities is the best way to minimize the spread and manage the disease. We have heard very little concern about simplifying the regulations, HD's and LPT's in this part of the region during public engagement during working group meetings and while out in the field.

Submitted by: Brett Dorak, Malta Area Wildlife Biologist

Date: 10/21/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

**MONTANA FISH, WILDLIFE & PARKS
HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION**

Species: Deer/Elk

Boundary Change Justifications

December 2019

Region: 6

Hunting District: 620

Year: 2020-2021

- 1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

This proposal aims to shift the north boundary of Deer/Elk HD 620 to run the entire length of Highway 2, opposed to dropping to the Milk River from Dodson to Malta as this is a point of confusion a lot of hunters (Fig 1). In addition, the LPT quota range will be increased to account for a population of mule deer that has increased dramatically over the past few years and current licenses are at the quota maximum. There should be no impact on the elk hunting LPTs or opportunity based on this boundary move.

Legal Description for proposed Deer/Elk HD 620 (Figure 1) and proposed quotas and quota ranges:

Those portions of Phillips and Valley Counties lying within the following-described boundary: Beginning at a point west of Dodson where US Highway 2 crosses the east boundary of the Fort Belknap Indian Reservation, then continuing southerly and westerly along said boundary to US Highway 191, then southwest along said highway to the Dry Fork Road, then easterly along said road to the Second Creek School, then north and easterly to First Creek Hall, then southeasterly to the Sun Prairie Road, then northerly along said road to Content Road, then northeasterly along said road to the Content-Larb Creek Road, then southeasterly along said road to Larb Creek Road, then northerly along said road to US Highway 2 at Saco, then westerly along said highway to the Fort Belknap Indian Reservation eastern boundary, the point of beginning.

- Mule Deer B-License: Proposed Range 50-2,000; Proposed Quota 500

Boundary Change Justifications December 2019

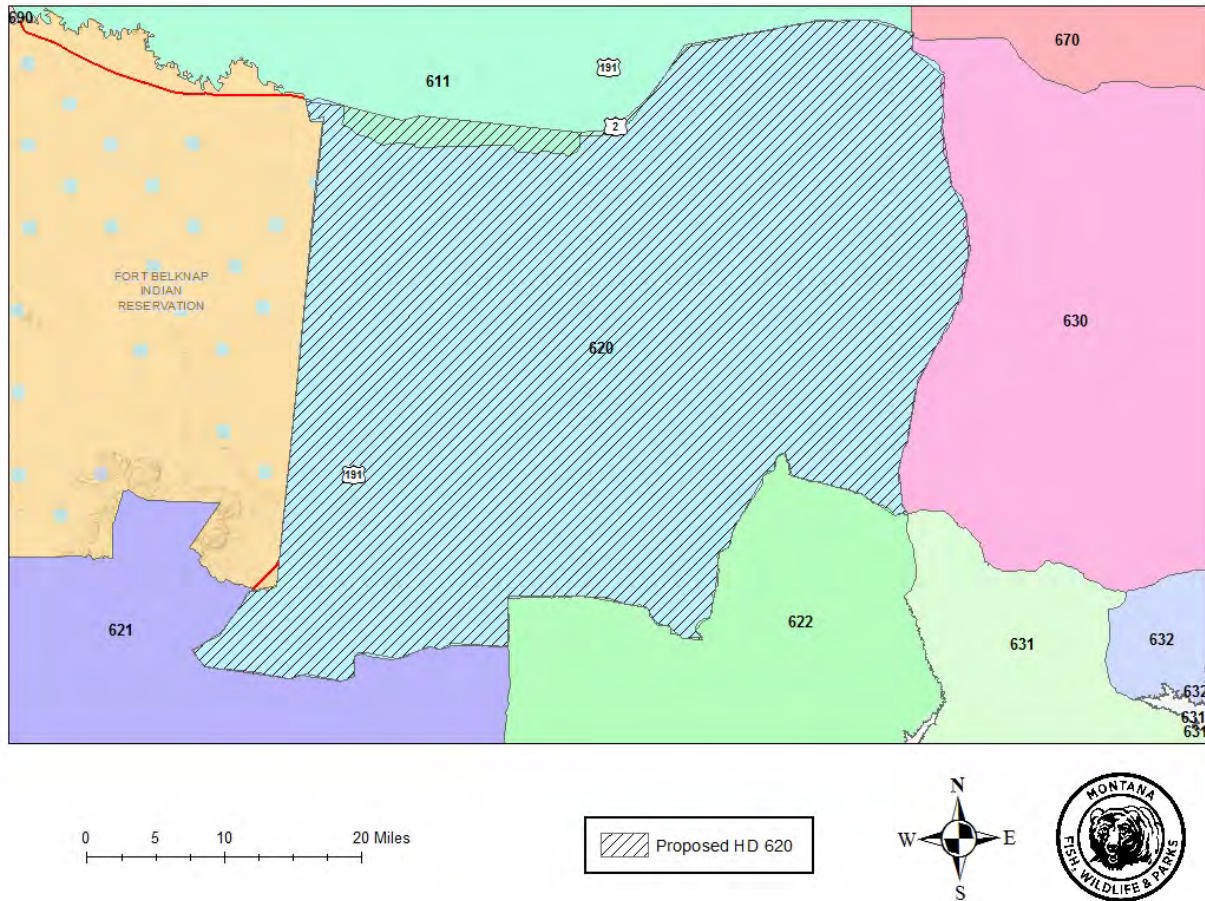


Figure 1. Current hunting districts relative to the proposed Deer/Elk HD 620.

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

The overall objective is simplification of the HD's and boundary language and with the boundary change moving from the Milk River between Dodson and Malta to Highway 2 between those two towns the proposed change will make a cleaner line and the HD will encompass everything south of the highway.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

Boundary Change Justifications

December 2019

Trends in mule deer populations are monitored by completing post-season and spring aerial surveys on one mule deer trend area in HD 620. Total number of mule deer observed, as well as fawn ratios from these surveys, are measured against population objectives within AHM to determine population status and trend of mule deer across the region as well as within hunting districts. Success of this proposal will be measured by the continual monitoring of the above parameters within HDs included in this proposal. Secondly, harvest surveys provide harvest estimates across the region as well as by HD. Mule deer harvest estimates provide another measure of population level and availability of mule deer for harvest, as well as prior year removal from the population and effectiveness of the proposed B-licenses types.

4. **What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

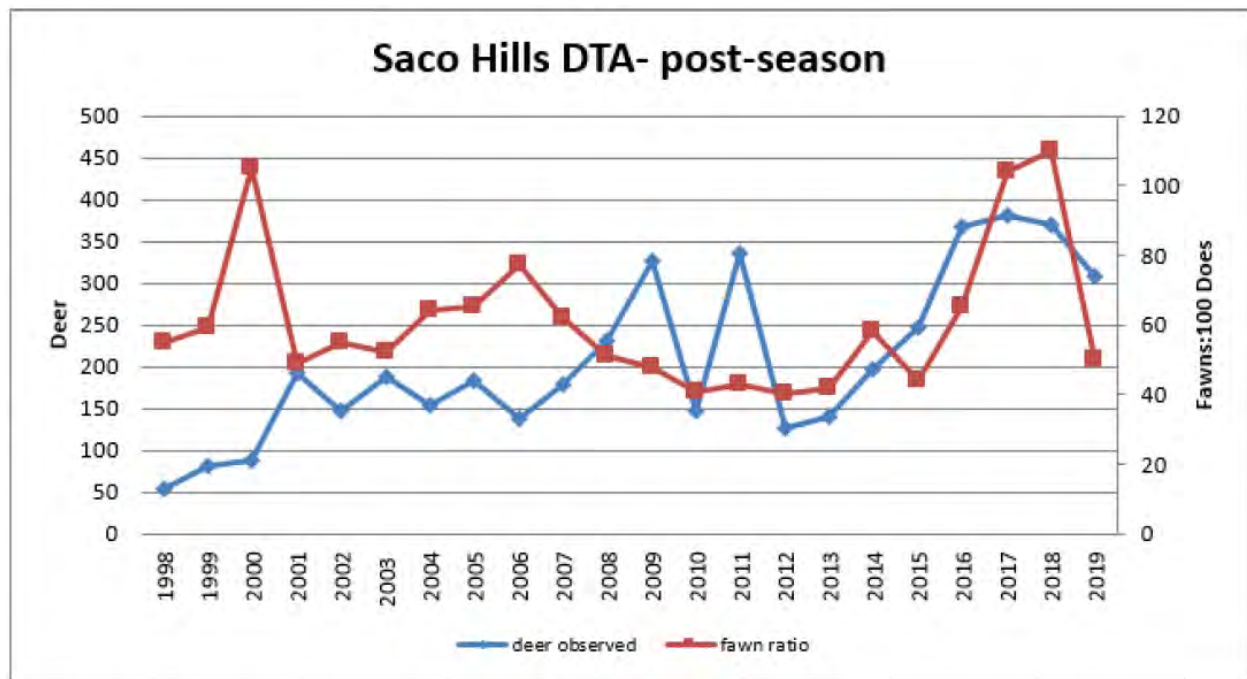


Figure 2. Region 6 Post Season Mule deer trend in Saco Hills DTA (HD 620), 1998-2019.

Total mule deer observed in the Saco Hills during the 2019 survey was 47% above the long-term average, fawn ratios were 50 fawns: 100 does (17% below LTA) and the buck ratio of 36 bucks: 100 does was 57% above LTA.

Boundary Change Justifications December 2019

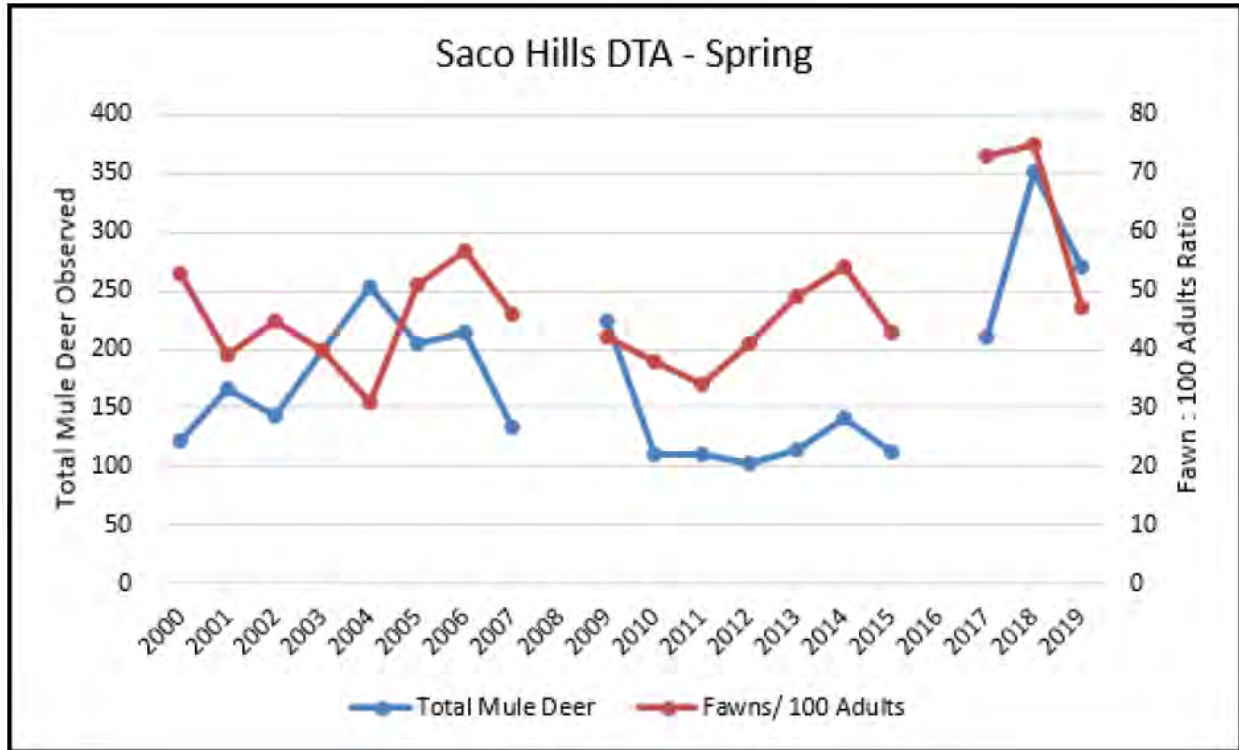


Figure 3. Region 6 Spring Mule deer trend in Saco Hills DTA (HD 620), 1998-2019.

Total observed mule deer during the 2019 spring flight was 21% above long-term average and the fawn ratio (47 fawns: 100 does) was down 15% from the long-term average.

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

The area has been recovering slowly since the 2010-2011 winter and has shown an upward trend since then. Hunter access across this hunting district is very high with large amounts of public lands and private lands enrolled into the block management program.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

In talking with this potential HD change in public meetings (discussed at the Breaks Elk Working Group Meeting) as well as while conversing with sportsmen it is agreed that this will be a move in the right direction to simplify regulations while maintaining great opportunity. Additionally, discussions with hunters and landowners about deer numbers has been that they are at elevated levels and ability to

Boundary Change Justifications December 2019

increase licenses to account for increased populations of mule deer across the HD would be beneficial from an opportunity standpoint, but also to help minimize game damage. With the concern of Chronic Wasting Disease and the goal to manage the disease through population management is another priority in the region. Much of the public understands that maintaining lower deer densities and concentrating harvest on areas of higher deer densities is the best way to minimize the spread and manage the disease.

Submitted by: Brett Dorak, Malta Area Wildlife Biologist

Date: 10/21/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Deer/Elk
Region: 6
Hunting District: 640
Year: 2020-2021

- 1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

This proposal aims to consolidate HD's 640, 641 and parts of HD 670 and HD 651 into one hunting district (640). More specifically, the proposal is to change the HD 640 boundary back to HWY 24 on the northwest boundary and move the southeast boundary to the Missouri River (currently HWY 2), thus eliminating HD 641 and associated LPT's (Fig 1). Currently HD 641 is a general hunting district for deer and elk and is part of the current 670 Antelope HD. Note: An antelope HD change is also proposed so that deer, elk and antelope Hunting District 640 will be the same.

Historically the only LPT that was directly tied to the HD 641 was the antlerless MD license (641-01) and usually at small quotas (currently 200, range 50-200) due to lower mule deer populations within the HD, generally along the Missouri River corridor. HD 640 historically has a higher mule deer population and a higher LPT quota annually (currently 800, range 100-900).

Legal Description for proposed NEW HD 640 (Figure 1) and proposed quota and quota range:

Boundary Change Justifications

December 2019

- 640 Northeast Montana: Those portions of Daniels, Sheridan, Roosevelt and Valley Counties lying within the following-described boundary: Beginning at a point where State Route 24 crosses the Canadian border, then southerly along said route to the Fort Peck Indian Reservation boundary, then easterly along said boundary to Big Muddy Creek, then southerly along said creek to the Missouri River, then easterly down the Missouri River to the North Dakota border, then north along said border to the Canadian border, then westerly along said border to State Route 24, the point of beginning.
- Mule Deer B-License: Range 100-1,500, Proposed Quota 1,000

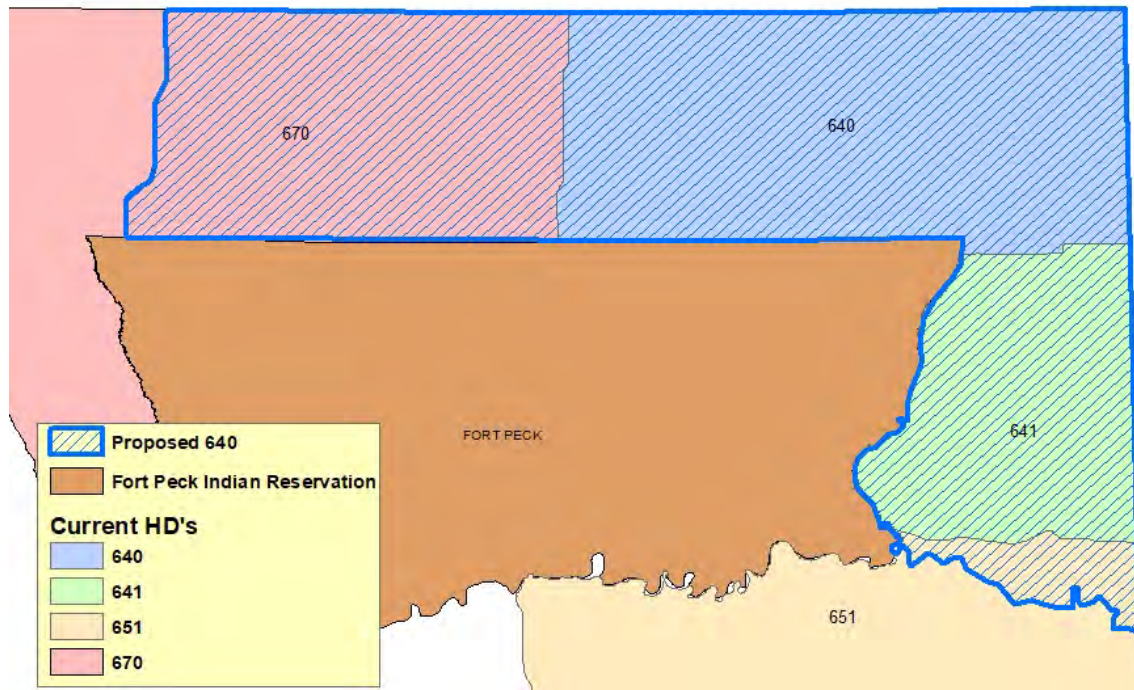


Figure 1. Current hunting districts relative to the proposed HD 640.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The overall objective is simplification of the HD's and boundaries and to reduce the number of Hunting Districts and LPT's in Region 6. Because HD 641 is a HD with only one LPT with little management objective and the eastern part of the current HD 670 has more similar habitat and landownership to HD 640, the consolidation and boundary change will create a more uniform HD and result in one less HD and LPT. There is no reason to have this HD in the region as a standalone and will be much simpler consolidated with HD 640 to become one large HD.

Also, with the boundary change to the Missouri River, the new HD will encompass everything north of the Missouri River. This change will more accurately reflect the mule deer population trends and movements on the north side of the river and remove a small area of HD 651 that lies between HWY 2 and the Missouri River. This simplifies the regulations and allows hunters to access mule deer on the north and south side of HWY 2 while hunting on one LPT.

Boundary Change Justifications

December 2019

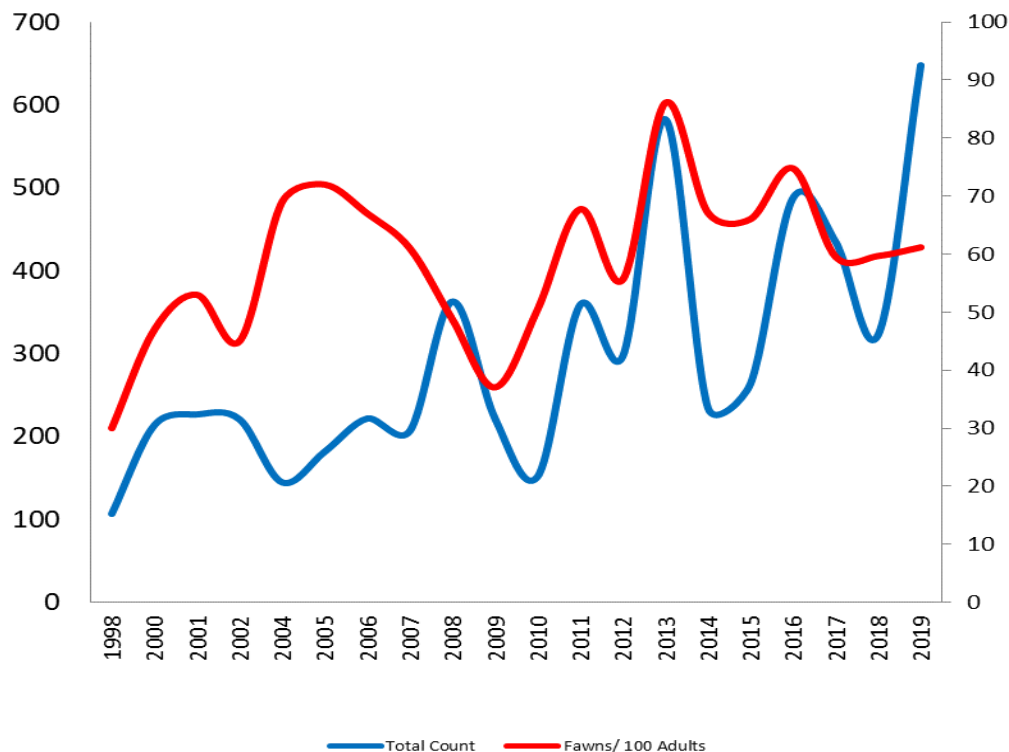
With this change, the objective will continue to be to manage mule deer populations within the range of 20% above and 30% below the long-term average LTA as stated under Mule Deer AHM (2001). The Hunting District included in this B-license proposal are currently above this range so providing additional antlerless harvest is needed as a deer management tool.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Because the goal will be to consolidate and adjust boundaries, the B-license quotas and quota ranges for the proposed HD will reflect the current HD 640, HD 641 and portion of HD 670. Because of the boundary change that will encompass part of HD 670, the quota range and quotas will also reflect what the assumed hunting pressure and harvest is in that area.

Trends in mule deer populations are monitored by completing post-season and spring aerial surveys on one mule deer trend areas in the proposed HD 640. Total number of mule deer observed, as well as fawn ratios from these surveys, are measured against population objectives within AHM to determine population status and trend of mule deer across the region as well as within hunting districts. Success of this proposal will be measured by the continual monitoring of the above parameters within HDs included in this proposal. Secondly, harvest surveys provide harvest estimates across the region as well as by HD. Mule deer harvest estimates provide another measure of population level and availability of mule deer for harvest, as well as prior year removal from the population and effectiveness of the proposed B-licenses types.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).



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During post Season surveys, total deer numbers increased are 116% above long-term post season average. Fawn ratios were well above average with a ratio of 83:100 does, up 12% from the LTA. Buck ratios also saw a large increase by 73% from 2017 and are 106% above LTA. Total deer numbers during the spring green up surveys are 120% above long-term spring average. Fawn ratios were slightly above average with a ratio of 61:100 adults, up 4% from the LTA and 2% above the 2018 spring survey.

Figure 2. Region 6 Spring Mule deer trend on Whitetail Cr DTA (HD 640), 1998-2019.

Both of these population metrics within the proposed HD are within the range of the liberal mule deer regulation packages as defined by Mule Deer AHM (2001), which is either-sex mule deer during the archery and general seasons, with liberal numbers of B-licenses.

There are no trend areas within the current HD 641 or within the area of the current HD 670 that the proposed boundary change will encompass, so population trends are extrapolated to those areas.

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

This change will help with the state and regional goal to simplify regulations and HD's within the region. The agreement is that there are too many HD's in the region and the eliminating and consolidating HD's is the goal of the Management Biologists and Game Wardens. This consolidation will eliminate one hunting district and one LPT, working towards the simplification process. This also allows hunters more freedom and a larger area to locate mule deer across a mixture of private and public lands throughout the larger HD.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

There is a growing frustration with current regulations, the number of LPT's and number of HD's. A reoccurring concern is the number of hunting districts in an area of a region that is managed as general hunting districts for deer and elk. Some public has also expressed the desire to have more freedom to go "where the deer are" and consolidating the 2 HD's and expanding the boundaries will allow more freedom to access public lands and more deer herds on one LPT.

With the concern of Chronic Wasting Disease and the goal to manage the disease through population management is another priority in the region. Much of the public understands that maintaining lower deer densities and concentrating harvest on areas of higher deer densities is the best way to minimize the spread and manage the disease. We have heard very little concern about simplifying the regulations, HD's and LPT's in this part of the region.

Submitted by: Ryan Williamson, Plentywood Area Wildlife Biologist

Date: 10/15/2019

**Approved: _____
Regional Supervisor / Date**

Boundary Change Justifications

December 2019

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Deer/Elk
Region: 6
Hunting District: 650
Year: 2020-2021

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal aims to consolidate HD 650 and HD 651 into one hunting district (650), thus eliminating HD 651 and associated LPT's (Fig 1). Currently HD 651 is a general hunting district for deer and elk and is part of the current 650 Antelope HD. Note: An antelope HD change is also proposed so that deer, elk and antelope Hunting District 650 will be similar.

Historically the LPT that was directly tied to the HD 651 was the antlerless MD license (651-00), with a quota range of 100-500. The current LPT for HD 650 (650-00) has a quota range of 50-500.

Legal Description for proposed NEW HD 650 (Figure 1) and proposed quota and quota range:

- That portion of McCone, Richland and Dawson Counties lying within the following-described boundary: Beginning at Circle, then northeast along State Route 200 to the North Dakota Border, then northerly along said border to the Missouri River, then westerly along the Missouri River to the Fort Peck Dam, then easterly along the north shore of Fort Peck Reservoir to the Fort Peck Dam Spillway, then southerly along State Route 24 to State Route 200, then easterly along said route to Circle, the point of beginning.
- Mule Deer B License 650-00
 - Range 50 - 1,500, with a Proposed Quota 800

Boundary Change Justifications

December 2019

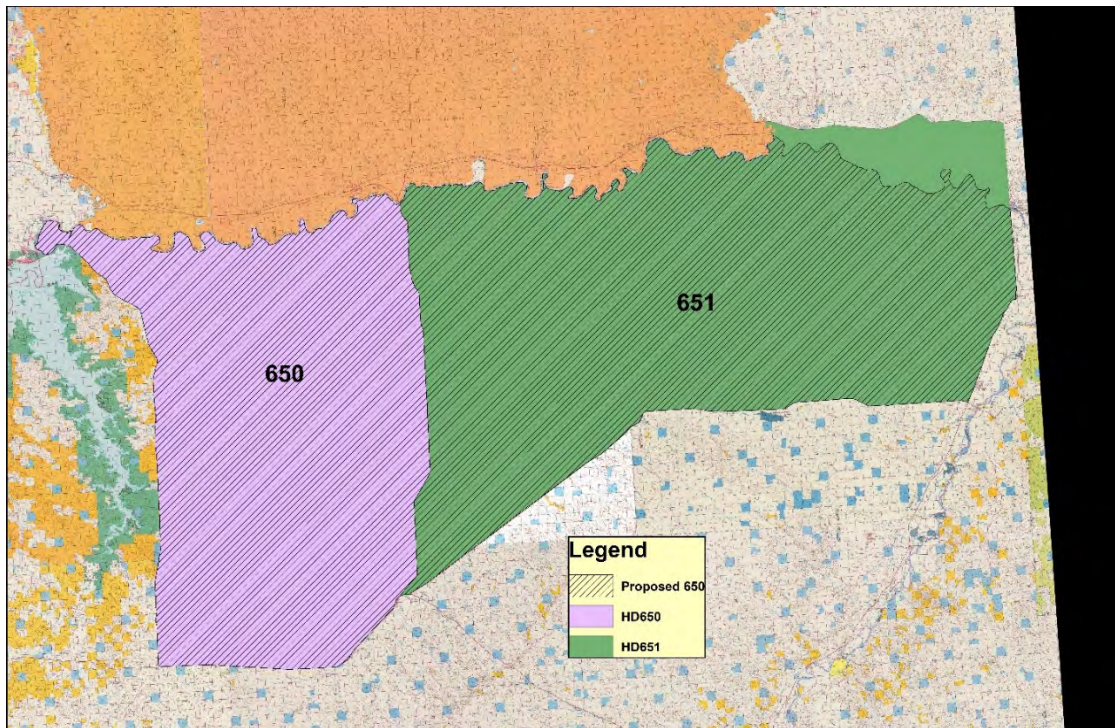


Figure 1. Current hunting districts relative to the proposed HD 650.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The overall objective is simplification of the HD's and boundaries and to reduce the number of Hunting Districts and LPT's in Region 6. Because HD 651 is a HD with only one LPT, the consolidation and boundary change will create a more uniform HD and result in one less HD and LPT. There is no reason to have this HD in the region as a standalone and will be much simpler consolidated with HD 650 to become one large HD.

Also, with the boundary change to the Missouri River, the new HD will encompass everything south of the Missouri River. This change will more accurately reflect the mule deer population trends and movements on the south side of the river and remove a small area of HD 651 that lies between HWY 2 and the Missouri River.

With this change, the objective will continue to be to manage mule deer populations within the range of 20% above and 30% below the long-term average LTA as stated under Mule Deer AHM (2001). The Hunting District included in this B-license proposal are within this range so providing additional antlerless harvest is needed as a deer management tool.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Because the goal will be to consolidate and adjust boundaries, the B-license quotas and quota ranges for the proposed HD will reflect the current HD 650 and HD 651.

Boundary Change Justifications

December 2019

Trends in mule deer populations are monitored by completing post-season and spring aerial surveys on two mule deer trend areas in the proposed HD 650. Total number of mule deer observed, as well as fawn ratios from these surveys, are measured against population objectives within AHM to determine population status and trend of mule deer across the region as well as within hunting districts. Success of this proposal will be measured by the continual monitoring of the above parameters within HDs included in this proposal. Secondly, harvest surveys provide harvest estimates across the region as well as by HD. Mule deer harvest estimates provide another measure of population level and availability of mule deer for harvest, as well as prior year removal from the population and effectiveness of the proposed B-licenses types.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

During spring surveys, total deer numbers in HD 651 were 39%, and in HD 650 were 27% above long-term average. Both of these counting units have metrics within the proposed HD that are within the range of the liberal mule deer regulation packages as defined by Mule Deer AHM (2001), which is either-sex mule deer during the archery and general seasons, with liberal numbers of B-licenses.

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

This change will help with the state and regional goal to simplify regulations and HD's within the region. The agreement is that there are too many HD's in the region and the eliminating and consolidating HD's is the goal of the Management Biologists and Game Wardens. This consolidation will eliminate one hunting district and one LPT, working towards the simplification process. This also allows hunters more freedom and a larger area to locate mule deer across a mixture of private and public lands throughout the larger HD.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

There is a growing frustration with current regulations, the number of LPT's and number of HD's. A reoccurring concern is the number of hunting districts in an area of a region that is managed as general hunting districts for deer and elk. Some public has also expressed the desire to have more freedom to go "where the deer are" and consolidating the 2 HD's and expanding the boundaries will allow more freedom to access public lands and more deer herds on one LPT.

With the concern of Chronic Wasting Disease and the goal to manage the disease through population management is another priority in the region. Much of the public understands that maintaining lower deer densities and concentrating harvest on areas of higher deer densities is the best way to minimize the spread and manage the disease. We have heard very little concern about simplifying the regulations, HD's and LPT's in this part of the region.

Submitted by: Drew Henry, Glasgow Area Wildlife Biologist

Boundary Change Justifications

December 2019

Date: 10/21/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Deer/Elk
Region: Region 6
Hunting District: 680/690
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal is to combine the Deer/Elk Hunting Districts 680 and 690 into one combined Hunting District (HD 690). Currently mule deer hunting in these districts is either-sex either species on a general license with an additional 700 mule deer B licenses available in HD 690 and 500 mule deer B license available in HD 680. There are currently 3000 white-tailed deer B licenses valid region-wide in Region 6 in addition to the single region white-tailed deer license. Elk hunting in these districts is currently only available through limited draw (although another proposal this year is to allow antlerless elk hunting on a general license in this hunting district). All elk permits and licenses in these districts are already valid in both HD 680 and 690 and combining these districts would not affect elk quotas or ranges.

Table 1. Mule Deer License Quotas in HD 680 & 690

Current LPT	2017	2018	2019	Proposed LPT	Proposed
690-00	550	550	700	690-00	1100
680-00	350	350	500		

Table 2. Mule Deer B license Quota Ranges in HD 680 & HD 690

Current LPT	Current Quota Range	Proposed LPT	Proposed Range
680-00	100-1000	690-00	100-2000
690-00	100-1000		

2. What is the objective of this proposed change?

The objective of this change is to reduce regulation complexity and increase flexibility for hunters. Elk permits and licenses are currently valid in both hunting districts and combining these two districts will reduce hunter confusion on where their licenses are currently valid. Combining these districts for deer hunters will reduce the number of districts and the number mule deer LPTs in the hunting regulations and

Boundary Change Justifications December 2019

allow hunters added flexibility when hunting. This change will also ensure the deer/elk hunting boundary is the same as the antelope hunting district for this area.

3. How will the success of this proposal be measured?

The success of this proposal will be seen through the simplification of the 2020 deer/elk hunting regulations and through decreased hunter confusion. The proposal is not expected to have a significant impact on deer or elk harvest in these districts.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Currently, mule deer counts in HD 680 are 31% above the long-term average and the fawn:adult ratio of 37 fawns:100 adults is within objective (30-60 fawns:100 adults). Mule deer in HD 690 were 5% below the LTA and the fawn:adult ratio was 36 fawns:100 adults which is also within objective.

Table 3. Spring Mule Deer Aerial Trend Survey Data for Hunting Districts 680 & 690 2011-2017

HD		2013	2014	2015	2016	2017	2018	2019	LTA
680	Total Count	146	115	207	353	278	180	235	179
	Fawn:Adult Ratio	44	47	38	49	43	49	37	42
690	Total Count	225	245	156	290	352	221	240	253
	Fawn:Adult Ratio	42	45	48	61	49	35	36	47

Table 4. Mule Deer Harvest in HD 690 2011-2018.

	2012	2013	2014	2015	2016	2017	2018	LTA
General License 680	273	291	294	324	440	421	424	300
General License 690	1002	1126	873	1226	1400	1358	1204	940
B-License (680-00)	105	127	0	0	51	168	133	124
B-License (690-00)	213	225	0	0	99	281	247	158

Elk numbers in the Elk Management Unit were below objective in the 2019 survey, but this was mostly due to poor survey conditions. The previous year's survey was 158% above the objective of 250 elk.

Table 5. Bears Paw Elk Management Unit Aerial Survey Data 2014-2019

	2014	2015	2016	2017	2018	2019
Total Count	731	415	435	523	647	190
Calf:Cow	37	33	49	46	43	32
Bull:Cow	73	33	50	22	40	29

Boundary Change Justifications December 2019

Overall harvest in this elk management unit has averaged 104 elk during the last 5 years. However, antlerless elk harvest has only averaged 64 elk. The average antlerless elk harvest success during the past five years has been 13%

Table 6. Bears Paw EMU Elk Harvest 2014-2018

LPT	2014	2015	2016	2017	2018
690-00 Antlerless Youth	3	6	2	0	2
690-01 Antlerless	22	84	39	33	43
690-20 (Either-sex)	23	26	30	22	21
690-21 Either-sex Archery	23	21	15	17	14
696-00 Antlerless Shoulder Season	--		11	8	10
697-00 Antlerless Permit	--		20	6	17
Total	71	137	117	86	107

5. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

The winter of 2017-2018 was a more severe weather and mule deer populations in this area did experience higher levels of winter mortality based on the 2018 spring surveys, but weather conditions since then have been favorable and deer numbers have rebounded in most areas. Hunting District 690 is mostly private land and access for elk hunting in this district has been a limiting factor for elk harvest.

6. **Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

The proposal to combine deer and elk hunting districts was presented to the Breaks Elk Working Group. As a result of comments received during that meeting this proposal was modified to address some of the comments received. This proposal has been presented to some of the landowners in the area and most of the comments received have been favorable. There have been some comments for sportsmen that would like to see Hunting District 680 or portions of this district included with HD 621 rather than with HD 690.

Submitted by: Scott Hemmer

Date: 10/21/19

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope
Region: 3
Hunting District: 318 and 329 (new)
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.). REMEMBER THIS STEP IS TO BE ACCOMPLISHED BY THE INITIAL ENTRY INTO THE DATABASE—SO FOLKS CAN START THIS NARRATIVE WITH #2 BELOW.

Reestablish antelope HD 329, following the 2006 legal descriptions, with editorial amendments.

318-20 Either Sex Quota: 175, Quota Range 50-350
318-30 Doe/Fawn Quota: 125, Quota Range 50-350

329-20 Either Sex Quota: 100, Quota Range 50-300

HD 318-Big Hole-Those portions of Beaverhead and Deer Lodge Counties lying within the following-described boundary: Beginning at Wise River, then southerly along the Wise River Scenic Byway (Route 73) to its junction with Route 278, then west along said route to Jackson, then south and west along the Jackson-Skinner Meadows Road to the Big Hole-Bloody Dick Divide, then westerly along said divide to the Montana-Idaho border and Continental Divide, then northerly and northeasterly along said divide to its junction with Route 569 (Mill Creek Road), then southerly along said route to its junction with Route 43, then southeasterly along said route to Wise River, the point of beginning.

HD 329-Horse Prairie North-That portion of Beaverhead County lying within the following-described boundary: Beginning at Clark Canyon Dam, then westerly along Route 324 to the Trail Creek-Lemhi Pass Road, then westerly along said road to the Montana-Idaho border at Lemhi Pass, then northerly along said border to the Bloody Dick-Big Hole Divide, then easterly along said divide to the Skinner Meadows-Jackson Road, then northerly along said road to Route 278, then easterly along said route to the Bannack-Grant Road, then southerly along said road to Grasshopper Creek, then easterly along said creek to Interstate 15, then southerly along said interstate to Clark Canyon Dam, the point of beginning.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective of this proposal is to restore balance and distribution to antelope harvest. HD 318 was created in 2007 by combining the Big Hole and Bachelor Mountain (HD 329) districts. The goal was to manage the antelope population as a single unit. Antelope are highly migratory and summer in the Big Hole and return to the Grasshopper Valley and Bannack Bench to winter. Public access to antelope is far greater on the southern end of the district and it has become apparent that the resident or non-migratory segment of the population in the southern end of HD 318 has been diminished through excessive harvest pressure. The situation was likely exacerbated by mild falls that delayed migration past the end of the antelope the last 3 years.

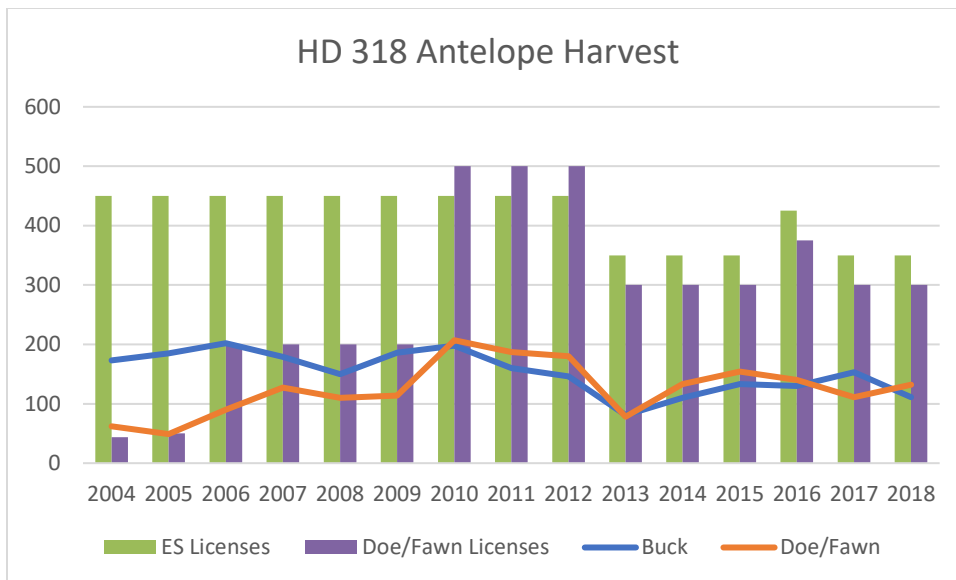
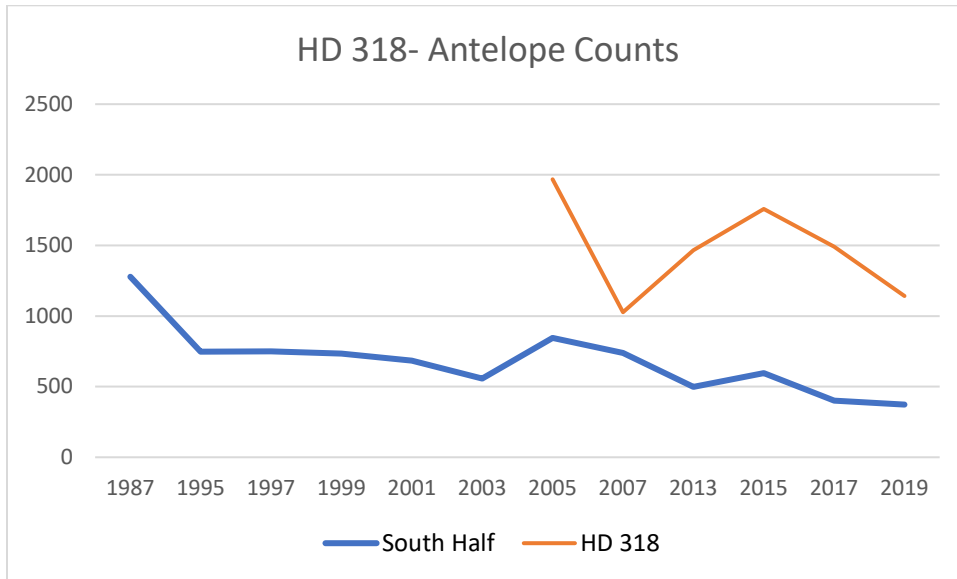
3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

The success of the proposal will be measured through annual harvest surveys, biennial population surveys and contact with individual sportsmen and landowners. There have been no antelope game damage complaints in the districts since 2005.

Boundary Change Justifications December 2019

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

The population objective is to maintain about 1500 antelope in the districts combined. HD 329 and that portion of HD 318 in the Grasshopper Valley can support at least 500 antelope. The last comprehensive survey showed antelope numbers falling below 500 in the south half of HD 318 and exceptionally low fawn production at 27:100 does.



5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

A Big Hole antelope migration study is scheduled to begin in late 2019/early 2020. This study will provide information regarding both migratory and resident segments of the antelope population as antelope will be captured on winter range in the proposed HD 329.

Boundary Change Justifications December 2019

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

FWP wildlife and enforcement staff, several landowners and numerous sportsmen have noted a decline in antelope numbers in the south half of HD 318.

Submitted by: Craig Fager and Vanna Boccadori

Date: October 10, 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope

Region: 4

Hunting District: 470

Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.). REMEMBER THIS STEP IS TO BE ACCOMPLISHED BY THE INITIAL ENTRY INTO THE DATABASE—SO FOLKS CAN START THIS NARRATIVE WITH #2 BELOW.

Proposal is to remove LPTs 470-20 and 470-30 and combine current antelope HD 470 with HD 471.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

Objective of the proposed change is to provide flexibility to hunters and improve antelope population and harvest management strategies for the antelope herd as populations fluctuate.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Success will be increased flexibility, increased hunter/harvest opportunity on larger landscapes, easier regulations and HD boundary descriptions. Population management should also be successful as currently antelope herds that fawn and summer in HD 470 move into HD 471 as winter progresses. As wintering antelope move out of HD 470 (sometimes during hunting seasons) antelope become unavailable to HD 470 license holders. About 1/3 to 1/2 the antelope in HD 470 move into HD 471 to winter. Combining the two HDs improves management of the overall herd as well.

Boundary Change Justifications

December 2019

HD 470 Antelope Harvest, 1992-Present

Year	ES Licenses	D/F Licenses	Harvest D/F Licenses	% Success D/F	% Success ES	Total Harvest Data		
						Bucks	D/F	Total
1992	320	0	0		46%	107	36	146
1993	155	0	0		35%	46	8	54
1994	150	0	0		40%	43	17	60
1995	100	0	0		60%	51	9	60
1996	75	0	0					
1997	75	0	0					
1998	75	0	0					
1999	75	0	0					
2000	100	0	0		41%	41	9	50
2001	100	0	0					
2002	300	0	0		63%	166	22	188
2003	300	0	0		55%	126	36	164
2004	250	50	21	42%	54%	135	32	168
2005	250	50	18	36%	54%	107	47	154
2006	250	150	57	38%	49%	132	62	194
2007	250	150	63	42%	41%	110	82	192
2008	250	150	45	30%	50%	124	61	185
2009	250	150	47	31%	47%	111	69	180
2010	250	150	42	28%	40%	105	42	147
2011	150	50	14	28%	43%	57	21	78
2012*	100	25	7	28%	48%	46	16	62
2013*	100	25	9	45%	36%	42	21	63
2014*	100	25	12	48%	61%	60	21	81
2015*	100	25	8	32%	56%	61	11	72
2016*	100	25	13	50%	74%	80	17	97
2017*	100	100	53	53%	58%	63	59	122
2018*	150	200	66	34%	57%	94	66	160
2019*	150	200						

* expanded HD boundary

- What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Antelope populations have been stable to increasing in this HD the past few years. Licenses have followed that trend. See attached surveys and harvest data. Increasing the quota ranges allows for increased harvest prescriptions if necessary, to follow trends.

Boundary Change Justifications December 2019

Antelope HD 470 Survey Trends 1981 - Present.

Year	Type	Bucks	Does	Fawns	Total	F/100 Does	B/100 Does	# Licenses
1981	T	225	524	320	1,069	61	43	
1986	T	203	508	281	992	55	40	
1990	P	91	214	32	437	15	43	
1991	P	29	125	64	218	51	23	
1995	T	69	210	67	346	32	33	100 ES
1996	No		Survey					
1997	T	82	239	57	378	24	34	75 ES
1998	No		Survey					
1999	P				102	43	57	75 ES
2000	T	113	286	192	591	67	40	100 ES
2001	P	82	261	91	434	35	31	100 ES
2002	P	75	157	120	352	76	48	300 ES
2003	T	138	471	300	909	64	29	300 ES
2004	P	141	236	75	452	32	60	250 ES, 50 D/F
2005	P	120	223	136	479	54	61	250 ES, 50 D/F
2006	T	224	555	247	1,026	45	40	250 ES, 150 D/F
2007	P	75	118	32	225	64	27	250 ES, 150 D/F
2008	P	64	191	67	322	34	35	250 ES, 150 D/F
2009	T	246	507	160	913	32	49	250 ES, 150 D/F
2010	P	79	188	51	318	27	42	250 ES, 150 D/F
2011	P	53	239	45	337	19	22	150 ES, 50 D/F
2012	T	101	436	109	646	23	25	
2012*	T*	160	561	147	868	26	29	100 ES, 25 D/F
2013	P	132	351	113	596	32	38	100 ES, 25 D/F
2014	P	91	230	129	450	56	40	100 ES, 25 D/F
2015	T	147	425	192	764	45	35	100 ES, 25 D/F
2016	P	102	209	83	394	40	49	100 ES, 25 D/F
2017	P	60	126	45	231	36	48	100 ES, 100 D/F
2018	T	330	501	200	1,031	40	66	150 ES, 200 D/F
2019	P	170	385	120	674	31	44	150 ES, 200 D/F

***2012 Total of newly expanded HD 470**

T= Total Survey

P= Production Survey

- Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

The past two winters have been above normal precipitation and colder temperatures for the most part in the area. 2017/18 was one of the worst winters on record for the Great Falls area. Winter 2018/19 was fairly mild, with the exception of the month of February 2019, having about 45" snow and average temperature of 0.3 degrees in Great Falls for the month. Antelope in many areas have been declining since the winter of 2012, coupled with effects of the last two winters. HD 470 antelope numbers have been stable to increasing as license numbers have been adjusted to meet needs of populations as rise and fall with fawn production and recruitment related to weather conditions. Habitat conditions in the HD remain good.

- Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

Boundary Change Justifications

December 2019

No groups or landowners were contacted related to the proposal as this does not affect them. Proposal will allow increased hunter opportunity and flexibility to follow antelope as they migrate in and out of HD 470/471. Area wardens (Lewistown) agreed with the proposal.

Submitted by: Cory Loecker, R4 Wildlife Manager
Date: 10/9/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE AND PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope
Region: 4
Hunting District: 470, 471
Year: 2020-21

1. Describe the proposed season / quota changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.). **REMEMBER THIS STEP IS TO BE ACCOMPLISHED BY THE INITIAL ENTRY INTO THE DATABASE—SO FOLKS CAN START THIS NARRATIVE WITH #2 BELOW.**

For the upcoming 2020-21 hunting seasons:

- Eliminate hunting district (HD) 470, and the 470-20 either-sex and 470-30 doe/fawn license/permit types (LPTs),
- Change the boundary of HD 471 such that it absorbs the former area of HD 470,
- Increase the quota range for the 471-20 LPT from 25 to 400 to 25 to 700, and the quota from 200 to 350.
- Increase the quota range for the 471-30 LPT from 5 to 400 to 5 to 650, and the quota from 200 to 400.

Modifications to the 2019 Montana Antelope Hunting Regulations for either-sex and doe/fawn antelope would read (changes highlighted in **RED**):

HD	License	Opportunity	Apply by Date	Quota	Archery Only Dates	General Season Dates	Opportunity specific details and/or restrictions
Region 4							
471	Antelope License: 471-20	Either-sex	June 1	350	Sep 05-Oct 09	Oct 10-Nov 08	
	Antelope License: 471-30	Doe/Fawn	June 1	400	Sep 05-Oct 09	Oct 10-Nov 08	
	Antelope License: 900-20	Either-sex	June 1	5,600	Aug 15-Nov 08	-	First and only choice. ArchEquip only.

The legal descriptions would also be amended to read (changes highlighted in **RED**):

470 Highwoods/Square Butte: Those portions of Cascade, Chouteau, Judith Basin, and Fergus Counties lying within the following-described boundary: Beginning at the Missouri River at Great Falls, downstream along said river to its junction with Hwy 80 at Ft. Benton, then southerly along said highway to its junction with US Highway 87 at Stanford, then westerly along said highway to its junction with the Missouri River at Great Falls, the point of beginning.

Boundary Change Justifications

December 2019

471 GeraldineHighwoods/Denton: Those portions of ~~Cascade~~, Chouteau, Fergus and Judith Basin Counties lying within the following-described boundary: Beginning at Missouri River at ~~Great Falls, Ft. Benton,~~ downstream along said river to its junction with the mouth of the Judith River, then southerly up said river to its junction with US Highway 87 at Hobson, then northwesterly along said highway to ~~the junction of Hwy 80 at Stanford, then northerly along said highway to the~~ its junction with the Missouri River at ~~Ft. Benton~~ Great Falls, the point of beginning.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objectives of the proposed changes are to: 1) Simplify antelope hunting regulations by reducing the number of antelope HDs and LPTs, 2) Make the boundaries more discernable via using major rivers and highways, 3) Better manage this overall antelope population, as the former boundaries likely did not capture the full range of this population, and 4) provide area landowners and hunters more flexibility in hunting/managing antelope in this area (i.e., more licenses valid across a larger district will allow more hunting where hunting is needed and less hunting where numbers are lower and/or absent in a given year). Figure 1 (at the end) shows the current HDs 470/471 and the proposed new HD 471.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

The area biologists for HD 471 and region 4 wildlife manager will consider this proposal successful if: 1) antelope hunter numbers/harvest increase in HD 471, 2) population levels remain steady and/or decrease slightly, and 3) landowners cease to experience significant crop damage due to antelope in this district.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information.

The area biologists responsible for HD 471 conducted the last complete-coverage survey of this district this year (2019). We counted a total of 1,797 antelope, which represents a 21% increase over the last complete-coverage survey (2016) and a 58% increase over the HD's long-term average (LTA; 860 total antelope). Additionally, the Denton N subunit has been used as a barometer for the entire HD when complete-coverage surveys cannot be conducted. The 2019 Denton N subunit count is 51% above its LTA of 326. See Tables 2 and 3 for antelope survey data for HD 471 and the Denton N subunit, respectively.

The last complete coverage survey for HD 470 occurred in 2018, when the area biologist observed 1,031 total antelope. This count represented a 15% increase over the average since 2003, and was the highest count since 2006. Antelope in HD 470 have a history of remaining relatively stable, likely due to the propensity of native habitat across this HD.

5. Provide information related to any weather/habitat factors that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, temperature/precipitation information).

Antelope numbers across central/eastern Montana were at or near all-time highs in the early 2000s, prior to late summer bluetongue outbreaks in 2007 and 2008, which affected antelope numbers across numerous region 4, 5, 6, and 7 HDs. Then, in 2010-2011, a record 2010-2011 winter decimated antelope populations in these same areas. Since then, a mix of good precipitation summers/droughty summers and mild/severe winters have led to stagnant or mild antelope population performance across much of these regions. Another record winter (2017-18), following immediately after a record drought summer 2017 caused antelope declines again across most of Montana's antelope range. For the most part, antelope numbers in HD 471, and particularly around Denton, have nevertheless persisted and even thrived despite this. Similarly, HD 470 antelope numbers have remained relatively stable since 2003.

Boundary Change Justifications December 2019

While poor population performance has affected many antelope districts in Region 4 and around Lewistown in particular, the area around Denton has seen above average and all-time high antelope numbers. Numerous landowners have filed game damage complaints with the department, as most of this area is cultivated cropland. Most of the landowners in this general area also allow opportunities for sportsmen to harvest antelope, and finding access is not too challenging compared to other species/areas.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

Area game wardens and some of the landowners in this area whom we discussed the proposal support it. There are no significant negative consequences associated with this proposal.

Submitted by: Sonja Andersen/October 2019

Approved: _____
Regional Supervisor / Date

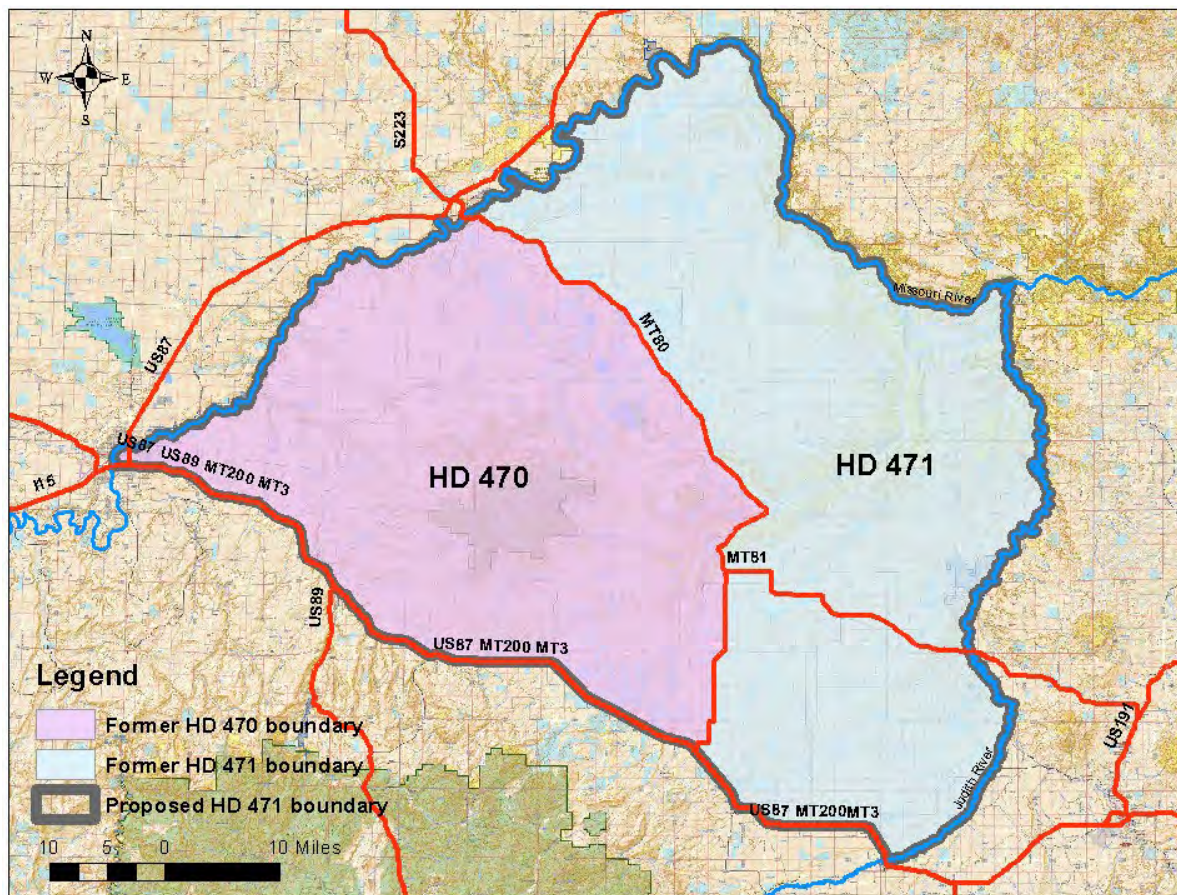
Disapproved / Modified by: _____
Name / Date

Reason for Modification:

Boundary Change Justifications

December 2019

Figure 1. Current HD 470/471 boundaries, overlaid by the new, proposed HD 471 boundary (thick grey outline).



MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope
Region: 4
Hunting District: Antelope 491
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

The current Antelope Hunting District 491 includes portions of FWP administrative regions 4 and 5. This proposal would adjust the HD's boundary so that the entire Antelope HD lies within FWP administrative Region 4.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

Boundary Change Justifications December 2019

The objective of this proposal is:

- To reduce hunter and landowner confusion by making the R4 antelope hunting district boundary consistent with the R4 administrative boundary
- To monitor and manage antelope within a HD that is more homogenous and which experiences similar weather and other environmental conditions.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

This proposal will simplify regulations, improve annual monitoring and public communication, and improve antelope management. Because all annual survey flight paths and animal locations have been digitally archived since 2007, historic trend data for both Antelope HDs 491 and 590 can be easily recalculated to reflect the proposed boundary adjustment.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Antelope quotas in HD491 are currently at the lowest levels of the Commission-approved range (75 ES, 25 DF). This reduction was approved after historic low numbers of antelope were observed in the R5 portion of HD491 following the severe winter of 2017-2018. Observed antelope numbers in the remaining (R4) portion of the HD did not appear to decline as dramatically that year. It will not be necessary to adjust the current HD491 Commission-approved quota range if this proposal is adopted.

5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

Recently, winter conditions have varied between the northern and southern portions (north and south of the Castle Mountains) of current HD491. This proposed adjustment will result in HDs within which weather and other habitat conditions are more similar than within the current HD491.

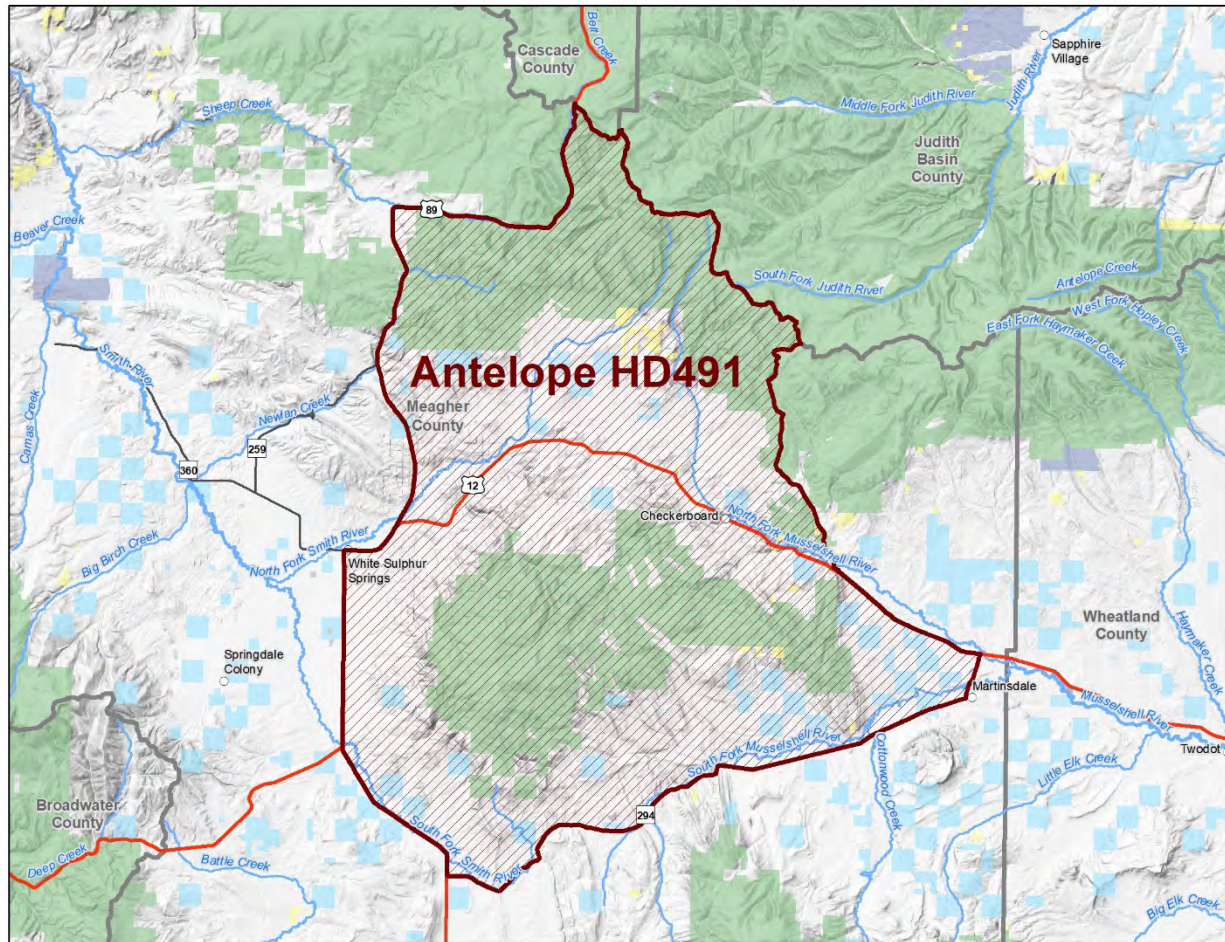
The public most commonly identifies hunting districts by the administrative region in which they lie. Making individual species hunting district boundaries consistent with administrative regional boundaries will reduce hunter confusion and will simplify the regulations. Overall hunter opportunity will be unaffected by this proposal.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

Staff from FWP Regions 4 and 5 have discussed and support this proposal. FWP will thoroughly vet and discuss this proposal with the public during the 2019/20 season setting process.

Boundary Change Justifications

December 2019



Legal Description

491 East Meagher: That portion of Meagher County lying within the following-described boundary: Beginning at King's Hill, then southeast along the Meagher-Judith Basin County line to USFS Road 274, then southward along said road to US Highway 12, then easterly along said highway to its junction with State Highway 294, then south and west along said highway to US Highway 89, then north along said highway (through White Sulphur Springs) to King's Hill, the point of beginning.

Submitted by: Jay Kolbe

Date: 10/20/2019

Approved: _____

Regional Supervisor / Date

Disapproved / Modified by: _____

Name / Date

Reason for Modification: _____

Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE & PARKS BOUNDARY CHANGE SUPPORTING INFORMATION

Species: Antelope
Region: 5
Hunting District: 514
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

The proposal is a boundary change for antelope HD 514:

514 Rock Creek: Those portions of Carbon, Stillwater and Yellowstone Counties lying within the following described boundary: Beginning at the Yellowstone River Bridge at Columbus, then east down the north bank of the Yellowstone River to US Highway 87 at Billings, then east on said highway to Old US Highway 87 (Old Hardin Road), then south along said road to the Crow Indian Reservation Boundary, then south and east along said boundary to its intersection with Sage Creek near Sage Creek Campground, then southeasterly up Sage Creek to the Sage Creek/Crooked Creek divide, then south down Crooked Creek to the Montana-Wyoming border, then west along said border to US Highway 212, then north along said highway to its junction with State Highway 78 at Red Lodge, then westerly and northerly along said highway to the Yellowstone River Bridge the point of beginning.

1) Recent season types were:

<u>Year</u>	<u>Licenses</u>
2010	150 ES + 75 Doe/Fawn
2011	150 ES + 75 Doe/Fawn
2012	150 ES + 75 Doe/Fawn
2013	150 ES + 75 Doe/Fawn
2014	150 ES + 75 Doe/Fawn
2015	150 ES + 75 Doe/Fawn
2016	150 ES + 75 Doe/Fawn
2017	100 ES + 25 Doe/Fawn
2018	100 ES + 25 Doe/Fawn
2019	100 ES + 25 Doe/Fawn

2. Why is the proposed change necessary?

The change is proposed to increase hunter opportunity on public lands lying outside of the current hunting district. Currently antelope that are hunted on private lands inside the hunting district redistribute to adjacent areas outside of the district once the season starts thus precluding harvest.

3. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective is to increase hunter opportunity over a larger area, which includes a large block of public land. The proposal will likely result in about a 10% increase in harvest.

4. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Harvest will be monitored through the statewide hunter questionnaire survey. The harvest is projected to increase by 10%

Boundary Change Justifications December 2019

5. **What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

The current HD 514 trend area only estimates the number of antelope in the northwest corner of the hunting district – the core antelope habitat. The population in that area is stable but below the objective of 400-600 antelope. However, recent experience has found that antelope numbers higher than about 350 result in increased game damage complaints. Other scattered groups of antelope (Cow Creek, Elbow Creek, Grove Creek, Sage Creek) in the hunting district are not systematically surveyed. The boundary change will impact hunting opportunity on the Sage Creek area herd where opportunistic observations indicate there are currently about 100 – 125 antelope. The overall objective for this area is to maintain the herd size at about that level. Currently hunting opportunity for this herd is restricted to one ranch. When pressured these antelope leave that ranch and move into the closed area east of Sage Creek Road.

1) Recent trend counts HD 514 (Northwest portion of hunting district only)

<u>Year</u>	<u>Count</u>	<u>Fawns/100 Does</u>	<u>Bucks/100 Does</u>
1990	143	55	15
1994	212	49	26
1998	132	36	21
2002	303	65	36
2006	528	70	41
2009 (Est.)	285	42	23
2010 (Est.)	348	41	16
2011	427	18	13
2012 (Est.)	368	56	15
2013 (Est.)	304	21	45
2014 (Est.)	314	43	51
2015 (Est.)	312	24	65
2016	361	39	18
2017 (Est.)	308	20	18
2018 (Est.)	336	40	15
2019 (Est.)	338	60	32

2) Recent Harvest Information for HD 514:

<u>Year</u>	<u>Hunters</u>	<u>Harvest</u>	<u>Success</u>	<u>Effort</u>
2006	142	89	63%	7.39
2007	174	112	64%	7.30
2008	142	73	51%	6.01
2009	194	91	47%	7.24
2010	149	87	61%	5.56
2011	159	67	42%	9.12
2012	179	102	57%	7.13
2013	NA	94	NA	NA
2014	148	71	48%	7.06
2015	153	95	62%	5.91
2016	NA	92	NA	NA
2017	NA	51	NA	NA
2018	131	58	44%	11.47

Boundary Change Justifications December 2019

6. Provide information related to any weather/habitat factors that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

- 1) Utilization transect information: None
- 2) Snow condition survey information:
The winters of 2017-18 and 2018-19 were severe but antelope numbers have been stable for the last eight years.
- 3) Describe access problems related to change, etc.
Access will increase due to increased availability of public land in the expanded hunting district.
- 4) Overwinter survival information (i.e. bad winter lost what % of population)
Despite severe winters in recent years antelope numbers remained stable or increased slightly.

7. Provide information relative to impacts to resident hunters, nonresident hunters and public & private land use.

Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

- 3) List specific sports groups or landowners:

Landowners Linsey Murray and Paul Loyning were contacted and support the proposal.

- 4) Indicate if proposal was recommended by public - is it in response to a concern by sportspersons:

This proposal is in response to a request by Linsey Murray, a local landowner

8. Provide information relative to impacts to resident hunters, nonresident hunters and public & private land use.

This proposal will increase hunter opportunity on public lands. No outfitters operate in this area.

Submitted by: Shawn T. Stewart

Date: October 22, 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope
Region: 5
Hunting District: Antelope 590
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

The current Antelope Hunting District 491 includes portions of FWP administrative regions 4 and 5. This proposal would adjust the HD's boundary so that the entire Antelope HD lies within FWP administrative Region 4. A portion of 491 would be added to antelope district 590 in R5.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective of this proposal is:

- To reduce hunter and landowner confusion by making the R4 and R5 antelope hunting district boundary consistent with the R4 and R5 administrative boundary.
- To monitor and manage antelope within HD's that are more homogenous and which experience similar weather and other environmental conditions.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

This proposal will simplify regulations, improve annual monitoring and public communication, and improve antelope management. Because all annual survey flight paths and animal locations have been digitally archived since 2007, historic trend data for both Antelope HDs 491 and 590 can be easily recalculated to reflect the proposed boundary adjustment.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Antelope quotas in HD491 are currently at the lowest levels of the Commission-approved range (75 ES, 25 DF). This reduction was approved after historic low numbers of antelope were observed in the R5 portion of HD491 following the severe winter of 2017-2018. Observed antelope numbers in the remaining (R4) portion of the HD did not appear to decline as dramatically that year. It will not be necessary to adjust the current HD491 Commission-approved quota range if this proposal is adopted. The antelope population in HD 590 are also near record lows. 450 ES licenses are currently available, the bottom of the quota range. We are proposing to reduce the ES quota range minimum to 200 in a separate proposal justification. No change in HD 590 ES license numbers is proposed at this time.

5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

Recently, winter conditions have varied between the northern and southern portions (north and south of the Castle Mountains) of current HD491. This proposed adjustment will result in HDs within which weather and other habitat conditions are more similar than within the current HD491.

The public most commonly identifies hunting districts by the administrative region in which they lie. Making individual species hunting district boundaries consistent with administrative regional boundaries will reduce hunter confusion and will simplify the regulations. Overall hunter opportunity will be unaffected by this proposal.

Boundary Change Justifications

December 2019

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

Staff from FWP Regions 4 and 5 have discussed and support this proposal. FWP will thoroughly vet and discuss this proposal with the public during the 2019/20 season setting process.

New Antelope District 590 Legal Description

590 Two Dot: *Those portions of Wheatland, Sweet Grass, Meagher and Park Counties lying within the following-described boundary: Beginning at Harlowton, then southerly along US Highway 191 to Sweet Grass Creek, then westerly along said creek to Crazy Mountain Divide, then north and west along said divide to the head of Sixteenmile Creek, then west along said creek to US Highway 89, then north along said highway to Route 294, then east along said route to US Highway 12, then east along said highway to Harlowton, the point of beginning.*

Submitted by: Justin Paugh and Jay Kolbe

Date: 10/23/2019

Approved:

Regional Supervisor / Date

Disapproved / Modified by:

Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope

Region: 6

Hunting District: 600

Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal would be to modify the existing HD 600 district boundary (see attached map). This proposal would move the eastern boundary of this HD west to Highway 241. The portion of HD 600 east of this highway would be included in HD 670.

Boundary Change Justifications

December 2019

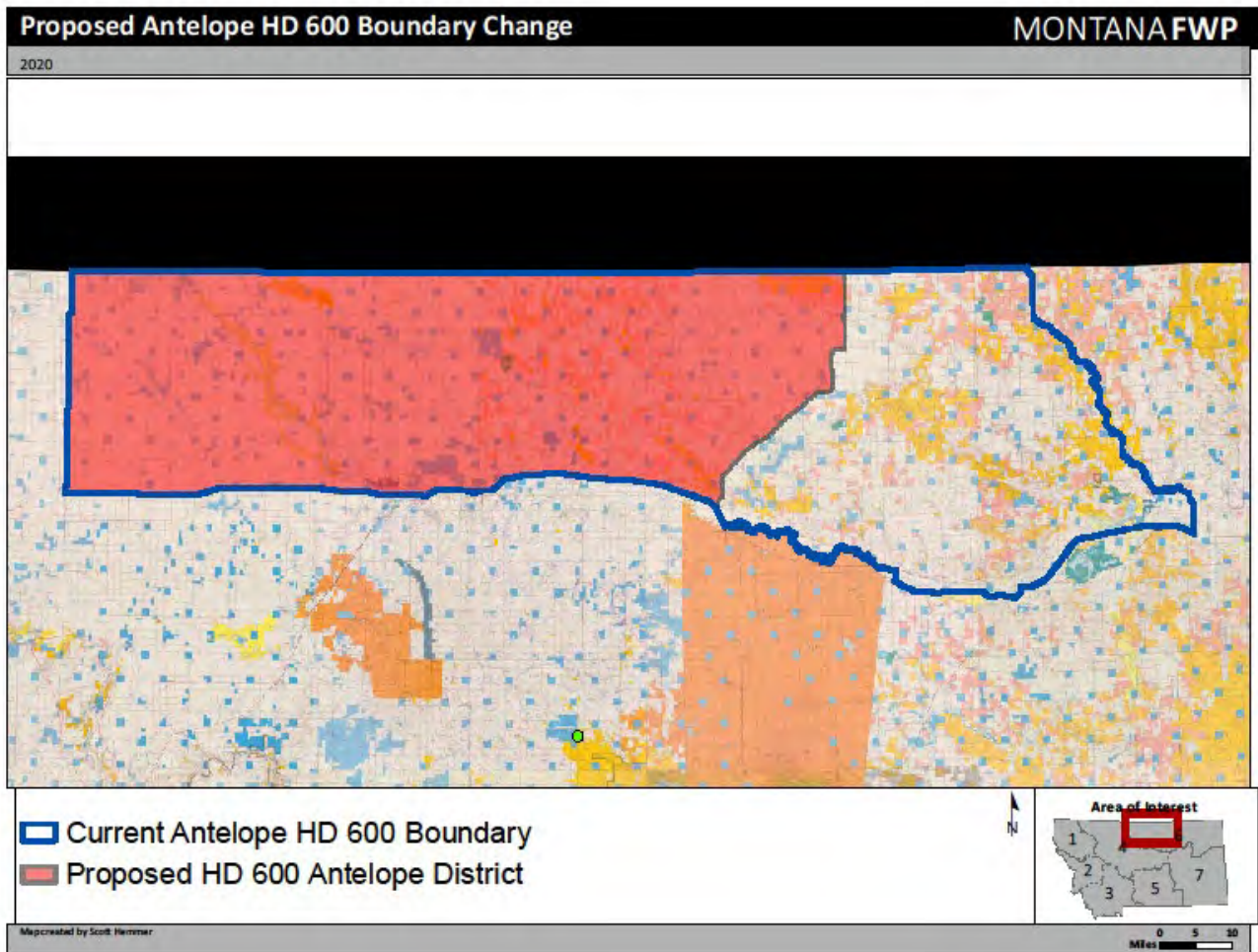


Figure 1. Antelope HD 600 boundary change

2. What is the objective of this proposed change?

The primary objective of this proposal would be to help reduce the complexity of the Region 6 hunting regulations. This change is part of a package of hunting district changes looking to reduce the number of hunting districts and to ensure that antelope districts and deer/elk districts in the Region have the same boundaries.

3. How will the success of this proposal be measured?

The success of this proposal would be seen through the simplification of the 2020 regulations and through decreased hunter confusion regarding the difference between antelope and deer/elk hunting districts

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

The 2019 aerial survey for HD 600 observed 0.87 antelope/square mile. This is below the Regional objective for this district of 1.0-1.6 antelope/square mile. The buck:doe ratio was 61 bucks:100 does which is above the objective of 30-40 bucks:100 does. The fawn:doe ratio (82 fawns:100 does) was also at the objective of 80-100 fawns:100 does.

Boundary Change Justifications December 2019

Table 1. HD 600 Aerial Trend and Harvest Data 2014-2019

	2014	2015	2016	2017	2018	2019
HD 600 Trend Survey Count	322	343	352	552	310	517
LPT 600-20 Harvest	54	47	49	58	50	--
LPT 600-30 Harvest	21	16	16	25	17	--

5. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

The winter of 2017-2018 was severe and resulted in increased winter mortality and lower antelope numbers throughout most areas in the Hunting District. Weather conditions since this time have been more favorable and resulted in increased antelope production in 2019. Public access, particularly in the eastern part of HD 600 is good with a higher percentage of public land and block management.

6. **Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

The proposed HD boundary changes were presented to the Breaks Elk Working Group. Outside of this group this proposal has not been presented to other sportsmen or landowner groups.

Submitted by: Scott Hemmer

Date: 10/21/19

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope

Region: 6

Hunting District: 620

Year: 2020-2021

1. **Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

Boundary Change Justifications

December 2019

This proposal aims to shift the boundaries of antelope HD 620 to make the northern boundary run the entire length of Highway 2, opposed to dropping to the Milk River from Dodson to Malta (Fig 1). The LPTs for this area will remain the same.

Legal Description for proposed Antelope HD 620 (Figure 1) and proposed quotas and quota ranges:

Those portions of Phillips and Valley Counties lying within the following-described boundary: Beginning at a point west of Dodson where US Highway 2 crosses the east boundary of the Fort Belknap Indian Reservation, then southerly, westerly, and northerly along said boundary to Little Suction Creek on the western boundary of the Fort Belknap Indian Reservation, then northwesterly along said creek to Suction Creek, then southwesterly along said creek to Cow Creek, then south along said creek to the Missouri River, then easterly downstream on said river and Fort Peck Reservoir to Timber Creek, then northerly along said creek to the Saco Road at Bill Anderson Ranch, then north along said road to US Highway 2 at Saco, then westerly along said highway to the east boundary of the Fort Belknap Indian Reservation, the point of beginning. NOTE: The following-described area is closed to all hunting: Slippery Ann Station, Section 36, T22N, R24E and Section 31, T22N, R25E, as posted.

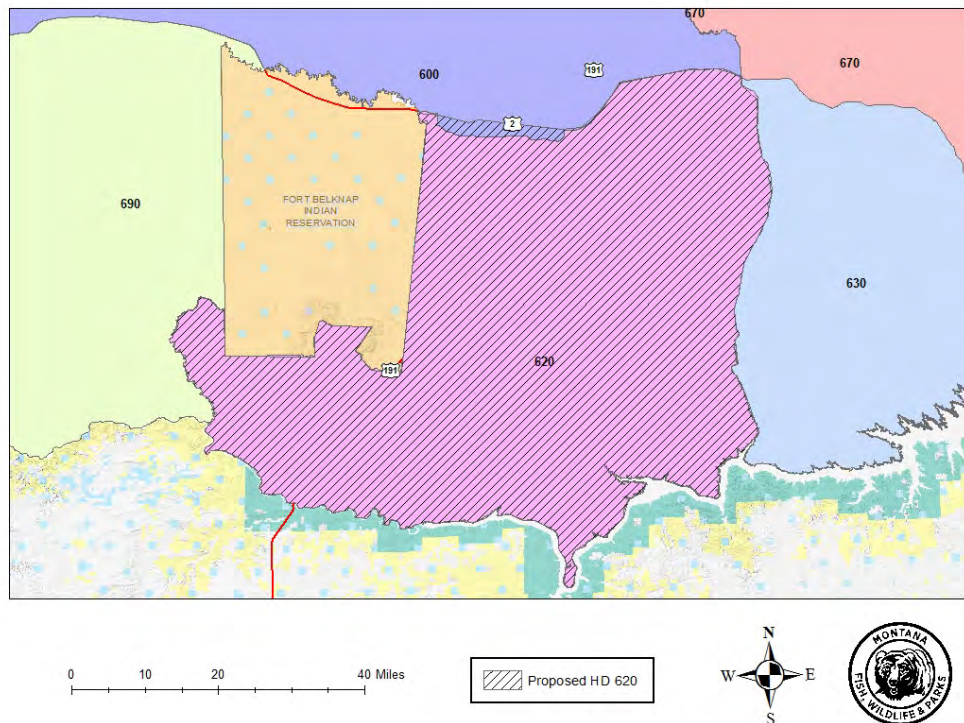


Figure 1. Current hunting districts relative to the proposed antelope HD 620.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

Boundary Change Justifications

December 2019

The overall objective is simplification of the HD's and boundary language across species and to simplify the HD's and LPT's in Region 6. This minor change looks to simplify boundaries and ensure that antelope and deer/elk hunting districts within the region have the same boundaries.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

The success of this proposal will be seen through the simplification and uniformity of the 2020 regulations and through less confusion amongst all individuals who utilize the regulations.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

There are currently two antelope counting areas flown annually during a summer aerial survey flights in HD 620.

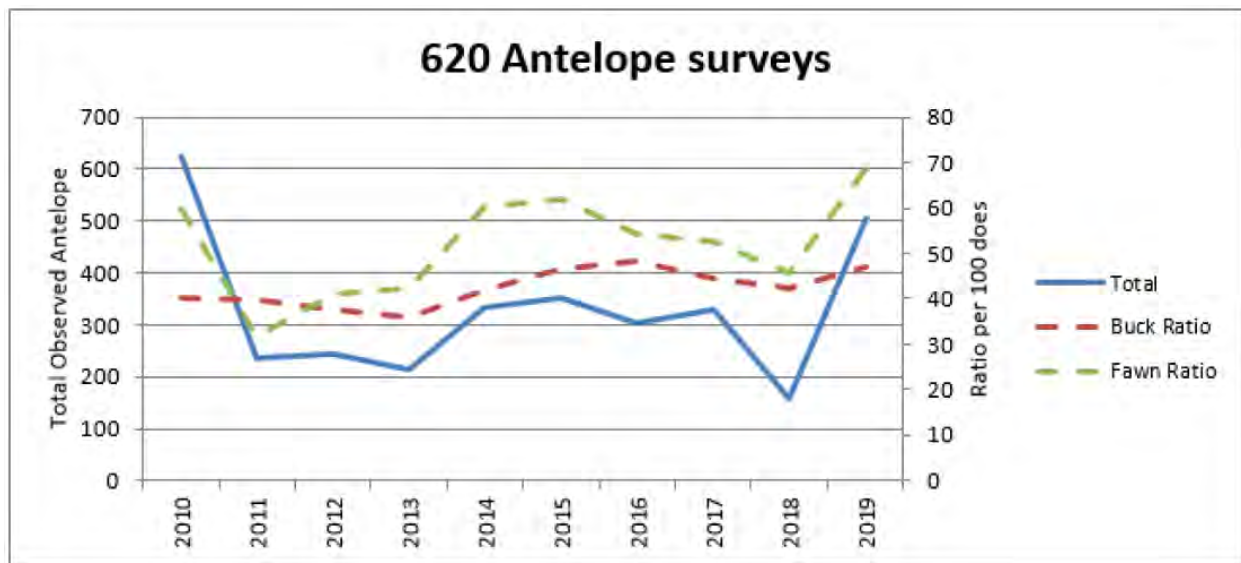


Figure 2. Region 6 summer antelope trends in Antelope Counting Units 3 & 8 in antelope HD 620, 2010-2019.

Boundary Change Justifications December 2019

Comparison of CUs 3 and 8 to MFWP Region 6 Antelope Management Plan (April 1996) population objectives:

	Management Plan Objective	2019 survey	2018 survey	2017 survey	2016 survey	2010 survey (pre-winter mortality)	10-year average
Density	2.0 - 2.6	1.7	0.5	1.1	1.0	2.1	1
Bucks:100 does	40 - 50	47	42	44	48	40	42
Fawns:100 does	80 – 100	69	46	53	54	60	52

Total antelope numbers observed for 2019 summer surveys were 6% above long-term average. Fawn ratios and buck ratios were 28% above and 7% above long-term average, respectively.

5. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

The area has been recovering slowly since the 2010-2011 winter and after a few years of growth was impacted again following the 2017-2018 winter, but due to more favorable weather conditions last winter and throughout this early summer there appeared to have been increased production in antelope. Hunter access across this hunting district is very high with large amounts of public lands and private lands enrolled into the block management program.

6. **Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

In talking with this potential HD change in public meetings (discussed at the Breaks Elk Working Group Meeting) as well as while conversing with sportsmen it is agreed that this will be a move in the right direction to simplify regulations while maintaining great opportunity.

Submitted by: Brett Dorak, Malta Area Wildlife Biologist

Date: 10/21/2019

Approved: _____
Regional Supervisor / Date

Boundary Change Justifications

December 2019

Disapproved / Modified by: _____

Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope

Region: 6

Hunting District: 640

Year: 2020-2021

1. **Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

This proposal aims to create a new Antelope Hunting District, HD 640 from a portion of the current Antelope HD 670 and HD 650 (note: separate HD 670 proposal). This boundary change, creation of new HD 640 and new alignment will overlap the proposed HD 640 for deer/elk and have the same boundaries and name for simplification. With the creation of a new HD 640, 2 new LPT's will be created for Either Sex (640-20) and Doe/Fawn licenses (640-30) (Table 1).

HD 640 was a separate antelope district prior to 2004. It was combined with HD 670 to make for larger antelope hunting districts and allow for hunter flexibility. A trade off is that most hunting and harvest occurs in areas with more public land and little harvest is occurring in the eastern portion of the current HD 670.

Description for proposed NEW HD 640 (Figure 1) and proposed quota and quota range (Table 1):

- 640 Northeast Montana: Those portions of Daniels, Sheridan, Roosevelt and Valley Counties lying within the following-described boundary: Beginning at a point where State Route 24 crosses the Canadian border, then southerly along said route to the Fort Peck Indian

Boundary Change Justifications December 2019

Reservation boundary, then easterly along said boundary to Big Muddy Creek, then southerly along said creek to the Missouri River, then easterly down the Missouri River to the North Dakota border, then north along said border to the Canadian border, then westerly along said border to State Route 24, the point of beginning.

Figure 1. Current hunting districts relative to the proposed Antelope HD 640.

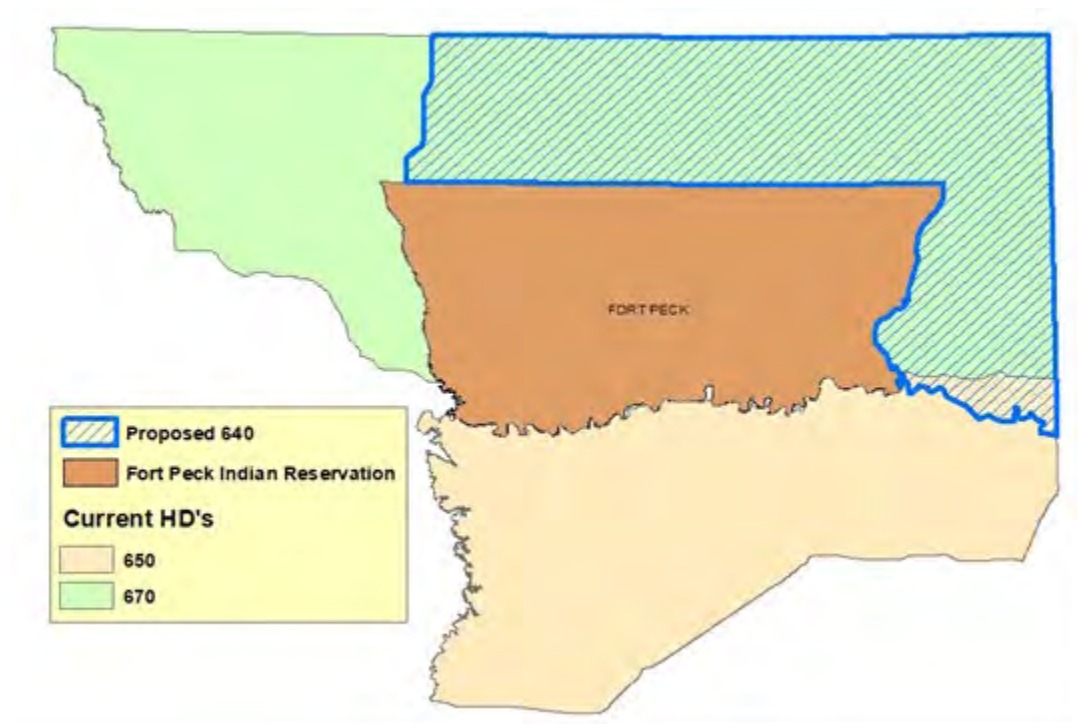


Table 1. Proposed Quota ranges and Quotas for LPTs in new HD 640.

Proposed LPT	Quota	Range Min	Range Max
640-20	100	50	300
640-30	25	10	100

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The overall objective is simplification of the HD's and boundary language across species and to simplify the HD's and LPT's in Region 6. Currently the antelope HD boundary and number (HD 670) does not line

Boundary Change Justifications

December 2019

up with the current Deer and Elk HD boundaries and numbers (overlaps HD 670, HD 640 and HD 641). Splitting the current HD 670 into 2 HD's and changing the boundaries will align with the proposed HD 640 Deer/Elk HD and cause less confusion to sportsman as to what HD they apply for and hunt in.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

Trends in antelope populations are monitored by completing summer aerial surveys on counting units set up across the region. Total number of antelope observed, as well as buck and fawn ratios from these surveys, are measured against population objectives. The proposed HD 640 does not have an Antelope Counting Unit located within the proposed boundaries but counting units are near the proposed HD 640. Trends and ratios from neighboring counting units, harvest statistics, drawing odds, local observations and public input will determine the success of splitting HD 640 out from the current structure.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

Total antelope observed on HD 670 was up 94% from last year, and above the 10-year average by 94%. Fawn ratios remain above their ten-year average with 74 fawns:100 does seen during this year's survey. Adult buck numbers remain high in this district. Antelope density is now within the objective identified in the management plan (Table 2).

Table 2. Counting Unit trend and ratios as compared to Average and Management Objective for Current HD 670, 2013-2019.

(Current) HD670	Management Plan Objective	2019 Survey	2018 Survey	2017 Survey	2016 Survey	2015 Survey	2014 Survey	2013 Survey	10-Year Average
Density	1.0 - 1.6	1.4	0.7	0.8	0.8	0.7	0.6	0.4	0.8
Bucks:100 does	30 - 40	40	48	63	58	68	45	32	40
Fawns:100 does	80 - 100	74	65	62	63	75	75	68	61

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

Boundary Change Justifications December 2019

There seems to be a natural split east and west of HWY 24 (proposed western boundary) relative to occupied habitats and landscape habitats as well as known populations found east of that HWY in the current HD 670. The boundary change makes sense as it will give folks who desire to hunt around the greater Plentywood a better chance at drawing at license for this proposed HD. Those hunters who prefer to hunt west of HWY 24 may still apply for the proposed restructured HD 670 and hunt in that HD.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

There is a growing frustration with current regulations, confusion between LPT numbering and overlapping of HD's with HD's of different species. One common concern/comment heard in the NE corner is the antelope HD 670 needs to be split so the Plentywood area hunters don't have to compete with hunters who hunt further west (likely the majority of license holders) in the current antelope HD 670. Also, some confusion has occurred with current naming (HD 670 antelope overlapping HD 640 and HD 641 Deer/Elk) possibly resulting in some confusion as to where the LPT is valid. Splitting the district and aligning with the proposed HD 640 Deer/Elk as well as naming the proposed HD 640 the same will work towards this concern. We have heard very little concern about simplifying the regulations, HD's and LPT's in this part of the region.

Submitted by: Ryan Williamson, Plentywood Area Wildlife Biologist

Date: 10/16/2019

Approved: _____

Regional Supervisor / Date

Disapproved / Modified by: _____

Name / Date

Reason for Modification:

Boundary Change Justifications December 2019

MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope

Region: 6

Hunting District: 650

Year: 2020-2021

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal aims to modify the northeast boundary of the Antelope Hunting District, HD 650, so that it follows the Missouri River rather than US Hwy. 2; aligning with other hunting district proposal changes in Region 6. This boundary change is part of a larger effort in FWP Administrative Region 6 to simplify regulations and hunting district boundary description.

Description for proposed HD 650

- Those portions of McCone, Garfield, Dawson, and Richland Counties lying within the following-described boundary: Beginning at the Fort Peck Powerhouse on the Missouri River, then easterly downstream along said river to the North Dakota border, then south along said border to State Route 200 at Fairview, then southwest and westerly along said route to Little Dry Creek, west of Brockway, then north down said creek to Fort Peck Reservoir, then northerly along east shore of said reservoir to the Fort Peck Reservoir to the Fort Peck Powerhouse, the point of beginning.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The overall objective is simplification of the HD's and boundary language across species and to simplify the HD's and LPT's in Region 6.

Boundary Change Justifications

December 2019

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Trends in antelope populations are monitored by completing summer aerial surveys on counting units set up across the region. Total number of antelope observed, as well as buck and fawn ratios from these surveys, are measured against population objectives. Trends and ratios from counting units, harvest statistics, drawing odds, local observations and public input will determine the success of the boundary change.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

As shown in the table below, antelope in HD 650 have improved over the past six years and are now near or within objectives as described in the Pronghorn Antelope Management Plan. The small boundary change here is likely to have little to no impact on the population status.

HD 650	Management Plan Objective	2019 survey	2018 survey	2017 survey	2016 survey	2015 survey	2014 survey	2013 survey	2012 survey	10-year average
Density	1.2 – 1.7	1.4	1.4	1.3	1.4	0.8	0.7	0.6	0.6	1.1
Bucks:100 does	35 - 45	36	39	52	54	40	41	39	45	44
Fawns:100 does	80 – 100	79	73	61	80	104	72	36	58	64

5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

Not applicable to this change

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

There is a growing frustration with current regulations, confusion between LPT numbering and overlapping of HD's with HD's of different species. We have heard very little concern about simplifying the regulations, HD's and LPT's in this part of the region.

Boundary Change Justifications

December 2019

Submitted by: Drew Henry, Glasgow Area Wildlife Biologist

Date: 10/21/2019

Approved: _____

Regional Supervisor / Date

Disapproved / Modified by: _____

Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Antelope

Region: 6

Hunting District: 670

Year: 2020-2021

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal aims to shift the boundaries of antelope HD 670 to align with the proposed deer and elk HD 670 boundary change. More specifically, the proposal is to shift the western boundary to Harlem-Turner Road (Route 241), absorbing a portion of antelope HD 600, and moving the new eastern boundary of HD 670 to HWY 24 to account for a new proposed antelope HD to the east, HD 640, and move the southern boundary to be Highway 2 (Fig 1).

The LPTs that are directly tied to this proposal are HD 600 (600-20 – either-sex; 600-30 – doe/fawn) and HD 670 (670-20- either-sex; 670-30 – doe/fawn). Current license allocations and ranges vary by the HD with:

HD 600

600-20 either-sex license: currently 100, range 50–1500

600-30 doe/fawn license: currently 5, range 50-1000

HD 670

Boundary Change Justifications December 2019

670-20 either-sex license: currently 300, range 25-500

670-30 doe/fawn license: currently 25, range 10-200

Legal Description for proposed NEW HD 670 (Figure 1) and proposed quotas and quota ranges:

Those portions of Blaine, Phillips, Valley, and Daniels counties lying within the following-described boundary: Beginning at a point where the Harlem-Turner Road (Route 241) joins the Canadian line, then southerly along said road to US Highway 2 at Harlem, then east and south along said highway to the Milk River Bridge at the Fort Belknap Indian Agency, then easterly along the Milk River to the Milk River Bridge on US Highway 2 west of Dodson, then easterly along said Highway to Nashua, then northerly along Porcupine Creek to the West Fork of Porcupine Creek, then northerly along said creek until the north boundary of the Fort Peck Indian Reservation, then easterly along said boundary until MT Highway 24, then northerly along said highway to the Canadian border, and then westerly until Harlem-Turner Road (Route 241), the point of beginning.

- Antelope Either-sex License Range 25-2,000, Proposed Quota 400
- Antelope Doe/Fawn License Range 10-1,200; Proposed Quota 75

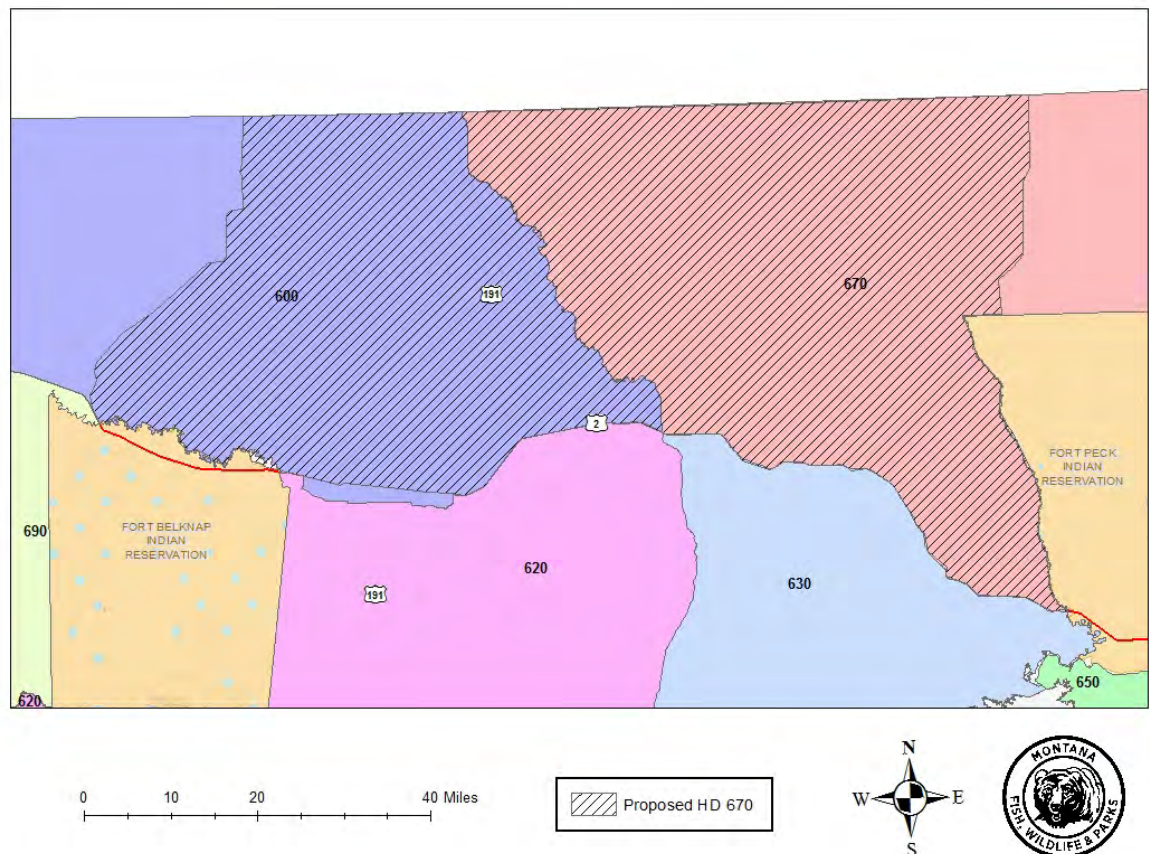


Figure 1. Current hunting districts relative to the proposed HD 670.

Boundary Change Justifications

December 2019

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

The overall objective is simplification of the HD's and boundary language across species and to simplify the HD's and LPT's in Region 6. Taking portions of antelope HD 600 and antelope HD 670 to make a new boundary for antelope HD 670 will align with the proposed HD 670 Deer/Elk HD and cause less confusion to sportsman as to what HD they apply for and hunt in as well as account for similar habitats and antelope populations.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

Trends in antelope populations are monitored by completing summer aerial surveys on counting units set up across the region. Total number of antelope observed, as well as buck and fawn ratios from these surveys, are measured against population objectives. The proposed boundary change to HD 670 has multiple Antelope Counting Units located within the proposed boundaries that will be used to along with their respective long-term data sets to assess any changes in populations over time.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

There are currently multiple antelope counting areas flown annually during a summer aerial survey flights and their respective data are below.

Boundary Change Justifications December 2019

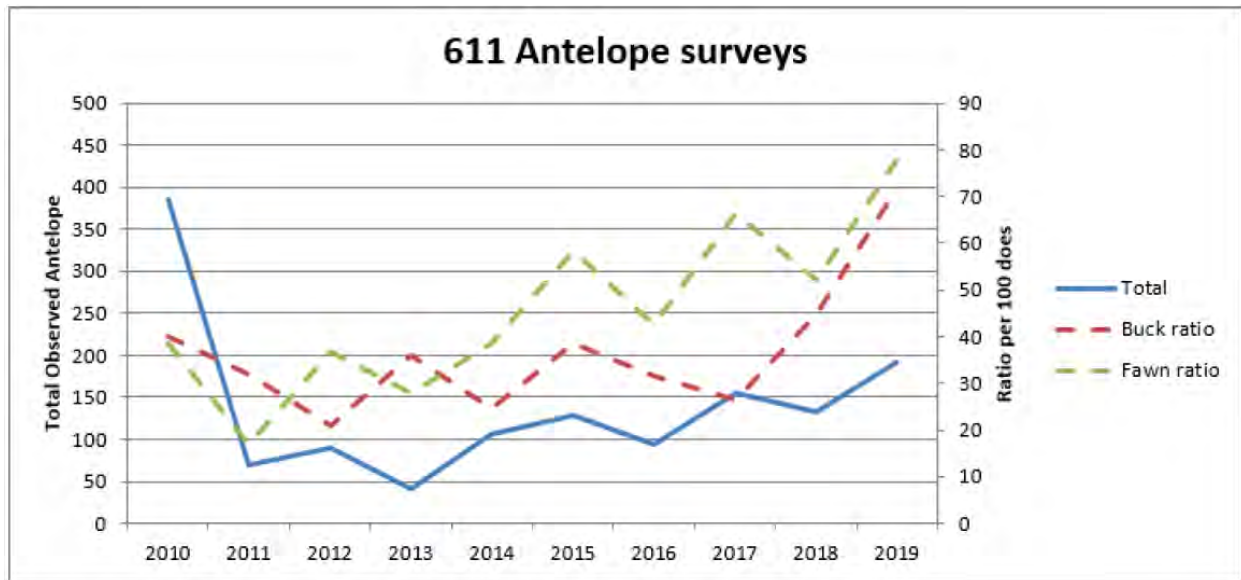


Figure 2. Region 6 summer antelope trends in Antelope Counting Units 5 & 7 in antelope HD 600 (Deer and Elk HD 611), 2010-2019.

Comparison of CUs 5 & 7 to MFWP Region 6 Antelope Management Plan (April 1996) population objectives:

	Management Plan Objective	2019 survey	2018 survey	2017 survey	2016 survey	2010 Survey (pre-winter mortality)	10-year average
Density	1.0 – 1.6	0.9	0.6	0.7	0.4	1.8	1.0
Bucks:100 does	30 - 40	71	45	26	31	40	37
Fawns:100 does	80 – 100	78	52	66	43	38	46

Total antelope numbers observed for 2019 summer surveys were 38% above long-term average. Fawn ratios and buck ratios were 66% above and 82% above long-term average, respectively.

Boundary Change Justifications December 2019

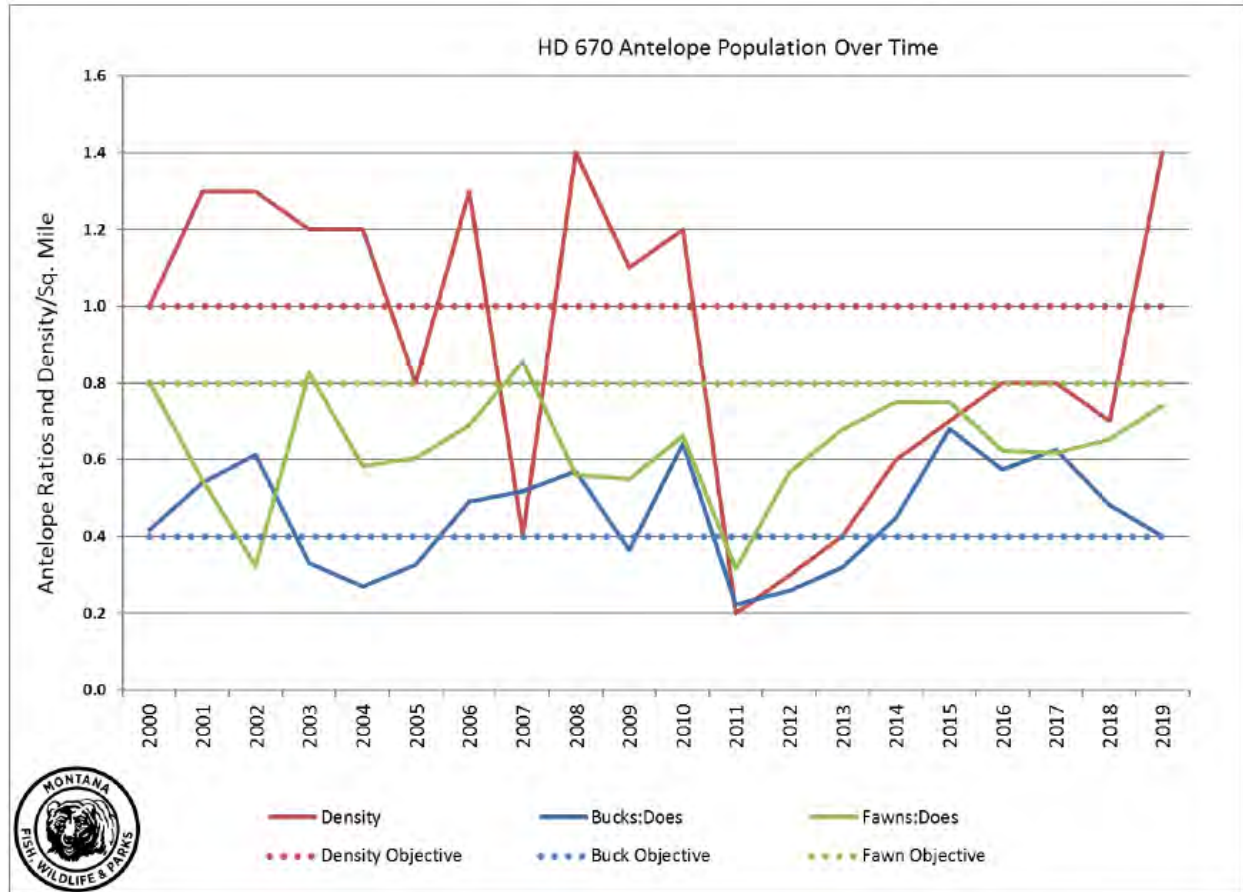


Figure 3. Region 6 summer antelope trends in Antelope Counting Units 6 & 15 in antelope HD 670.

	Management Plan Objective	2019 survey	2018 survey	2017 survey	2016 survey	2015 survey	2014 survey	2013 survey	10-year average
Density	1.0 - 1.6	1.4	0.7	0.8	0.8	0.7	0.6	0.4	0.8
Bucks:100 does	30 - 40	40	48	63	58	68	45	32	40
Fawns:100 does	80 - 100	74	65	62	63	75	75	68	61

Total antelope numbers observed for 2019 summer surveys were 94% above the 10-year average. Fawn ratios were 21% above the 10-year average and buck ratios were right at the 10-year average.

5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

Boundary Change Justifications December 2019

This change will help with the state and regional goal to simplify regulations and HD's within the region. Habitat types within the described proposed boundary change align more closely to each other than the current hunting district boundaries and this will align antelope hunting districts with the deer and elk hunting districts in the area to provide a simpler and clearer understanding for hunting opportunities, especially individuals who wish to hunt both deer and antelope within the same location.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

There is continual frustrations heard about current regulations and confusion between LPT numbering and overlapping of HDs of different species and different numbers. In talking with this potential HD change in public meetings (discussed at the Breaks Elk Working Group Meeting) as well as in the field with multiple sportsmen it is agreed that this will be a move in the right direction to simplify regulations while maintaining great opportunity.

Submitted by: Brett Dorak, Malta Area Wildlife Biologist

Date: 10/21/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Black Bear
Region: 3
Hunting District: BMU 319
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

Boundary Change Justifications

December 2019

The proposal is to expand current black bear BMU 319 to incorporate HDs 390, 391, 392. This proposal is the result of R4's desire to simplify their black bear regulations by going to one Region wide BMU that encompasses only Region 4. HDs 390, 391, 392 are currently part of black bear BMU 440 which encompasses the Big Belt Mountains geographic area.

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

This proposal was necessitated by Region 4's desire to simplify their black bear regulations for the public and internal staff as they believed that having Region 3 HDs in their BMU (440) caused confused among hunters and staff (black bear harvest forms from HDs 390, 391, 392 had to be sent to Region 4). This proposal is in conjunction with the R4 proposal to move their BMU boundary to the R4 regional boundary and is expected to simplify the regulations by not having HDs from more than one Region in the same BMU.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

The success of the proposal will be measured by quicker processing of MRRE forms as forms will no longer need to be sent from one Region to another. The success of the simplified regulations will ideally result in fewer questions from the public regarding where their bear was harvested.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

The estimated BMU 440 black bear population size from the 2011 Black Bear Harvest Research & Management in Montana final report (Mace & Chilton-Radant, 2011) was 337 bears at a density of 8 bears per 100 sq.km (range of 204-489 at densities of 5-8-12 bears per 100 sq. km). With the proposed R4 and R3 changes the Big Belt Mountains will no longer be managed as an ecological unit for black bears. R4 black bears will be managed on the regional level while management of black bears in HDs 390, 391, 392 (west side of the Big Belt Mountains for the most part) will be incorporated into the existing BMU 319 which currently covers the Bridger and Bangtail Mountains geographic area. The estimated existing BMU 319 black bear population size from the 2011 Black Bear Harvest Research & Management in Montana final report (Mace & Chilton-Radant, 2011) was 145 bears at a density of 15 bears per 100 sq.km (range of 122-169 at densities of 13-15-18 bears per 100 sq. km).

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

None of this information is relevant to the proposed change.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

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This proposal will be vetted with the public during the 2019/20 season setting process.

Submitted by: Adam Grove, Wildlife Biologist – Townsend

Date: 10/28/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

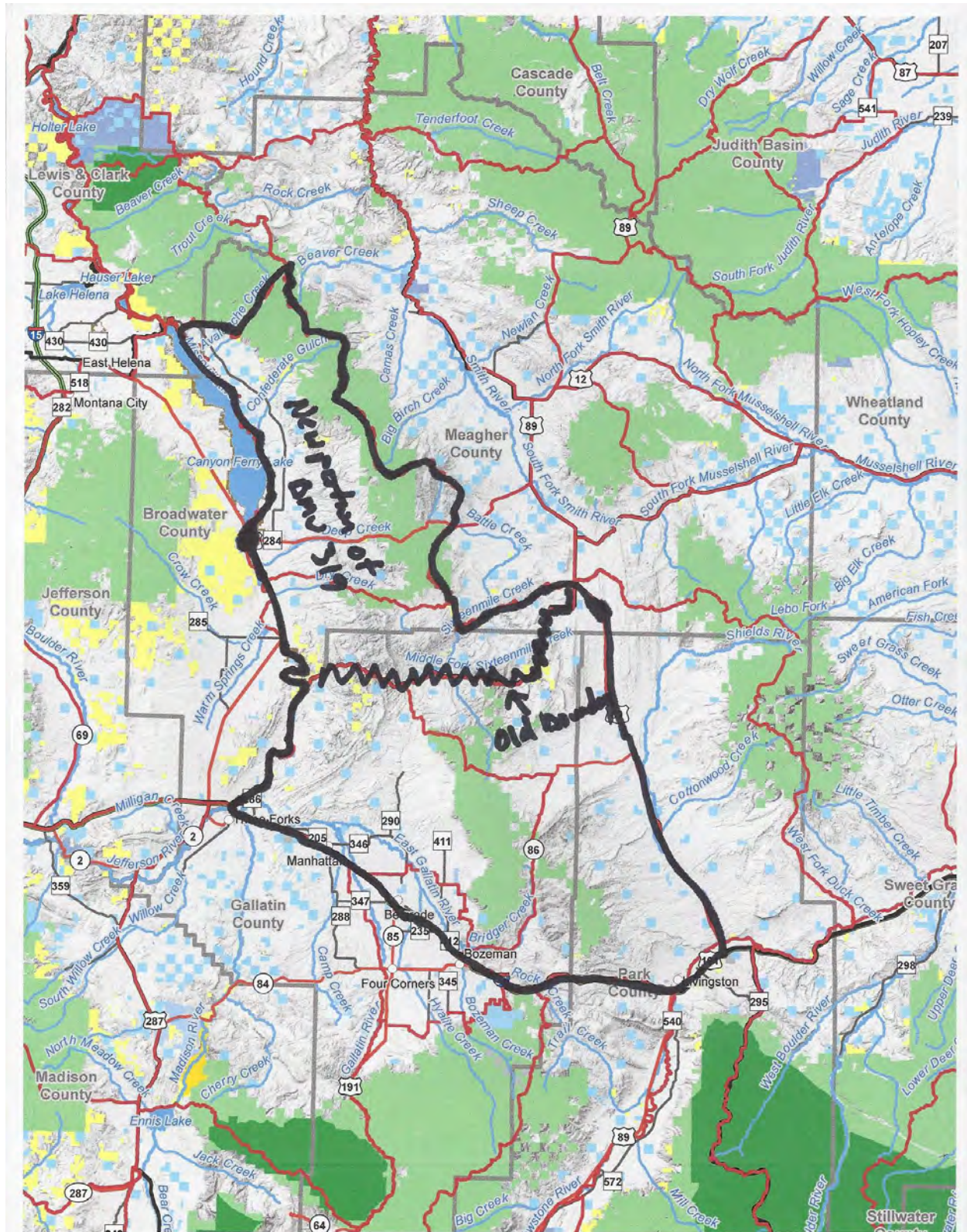
Reason for Modification:

Citations

Mace, R., and T. Chilton-Radant. 2011. Black Bear Harvest Research & Management in Montana, Final Report. Montana Dept. of Fish, Wildlife & Parks, Wildlife Division, Helena, MT, USA.

Boundary Change Justifications

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MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Black Bear

Region: 4

Hunting District: BMUs 411, 420, 440, & 450

Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal would consolidate all R4 Bear Management Units (BMU) into a single BMU 400 that has a boundary consistent with the region's administrative boundary.

There are currently four (BMU) that include portions of FWP administrative Region 4. However, not all of Region 4 is included in a BMU and, in two cases, existing R4 BMU boundaries extend into other administrative Regions.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objectives of this proposed change are:

- To simplify Black Bear harvest regulation. All current R4 BMUs have the same season dates, inspection requirements, and all allow the take of Either-sex Black Bear. There are no BMU-specific harvest quotas/limits in R4. R4 believes that a consistent Regional harvest regulation will continue to be sufficient to conserve and manage black bears in the future.
- To make the R4 BMU boundary consistent with the administrative Regional boundary. Currently, R4 BMUs extend into portions of Regions 3 and 5. This inconsistency results in hunter confusion, causes reporting errors, and is unnecessary to effectively manage black bear harvest.
- To manage black bear harvest at a large spatial scale, consistent with the FWP Black Bear Integrated Population Model (IPM). The IPM will provide FWP with more accurate predictions regarding black bear population size and trend. However, the IPM needs to consider relatively large populations (and annual harvest) to produce accurate and precise estimates. Current R4 BMUs include too few black bears to be analyzed by the IPM individually.

FWP would continue to require mandatory inspection of harvested black bears, including reporting of harvest location. Future black bear harvest data can be directly compared to past data.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

Successful implementation of this proposal will reduce the complexity of black bear regulations, improve the quality of black bear harvest data, and facilitate better analysis of black bear population and trend in Region 4. The change would not reduce FWP's ability to conserve black bears in the Region nor change hunter harvest opportunity.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Black bear populations are sensitive to the rate of female mortality. Researchers generally found that an annual female mortality of rate of <16% will result in stable to increasing populations (Miller 1990, Beck 1991, Freedman et al. 1993). FWP researchers in Montana's Swan Valley determined that the annual female non-harvest mortality rate was 6% (Mace and Chilton-Radant 2011). Mace and Chilton-Radant (2011) estimated that, in 2010, the total female black bear population in R4 BMUs was 975.

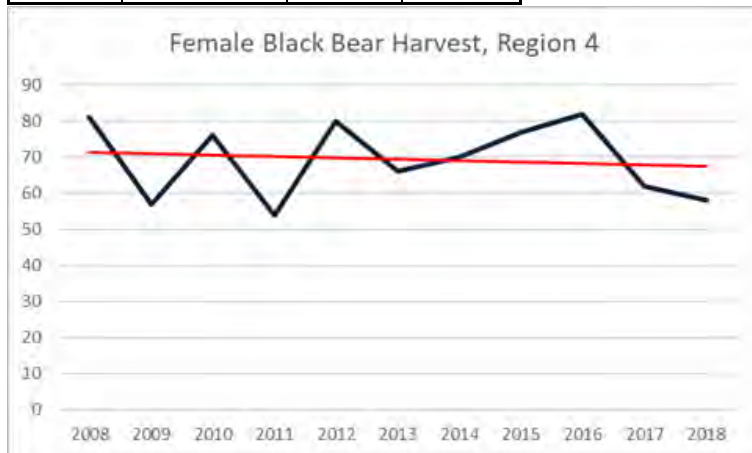
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Using Mace and Chilton-Radant's population estimate, the average total annual female harvest rate (both harvest and non-harvest) in R4 is <13%. This mortality rate is likely to result in a stable to increasing Regional black bear population.

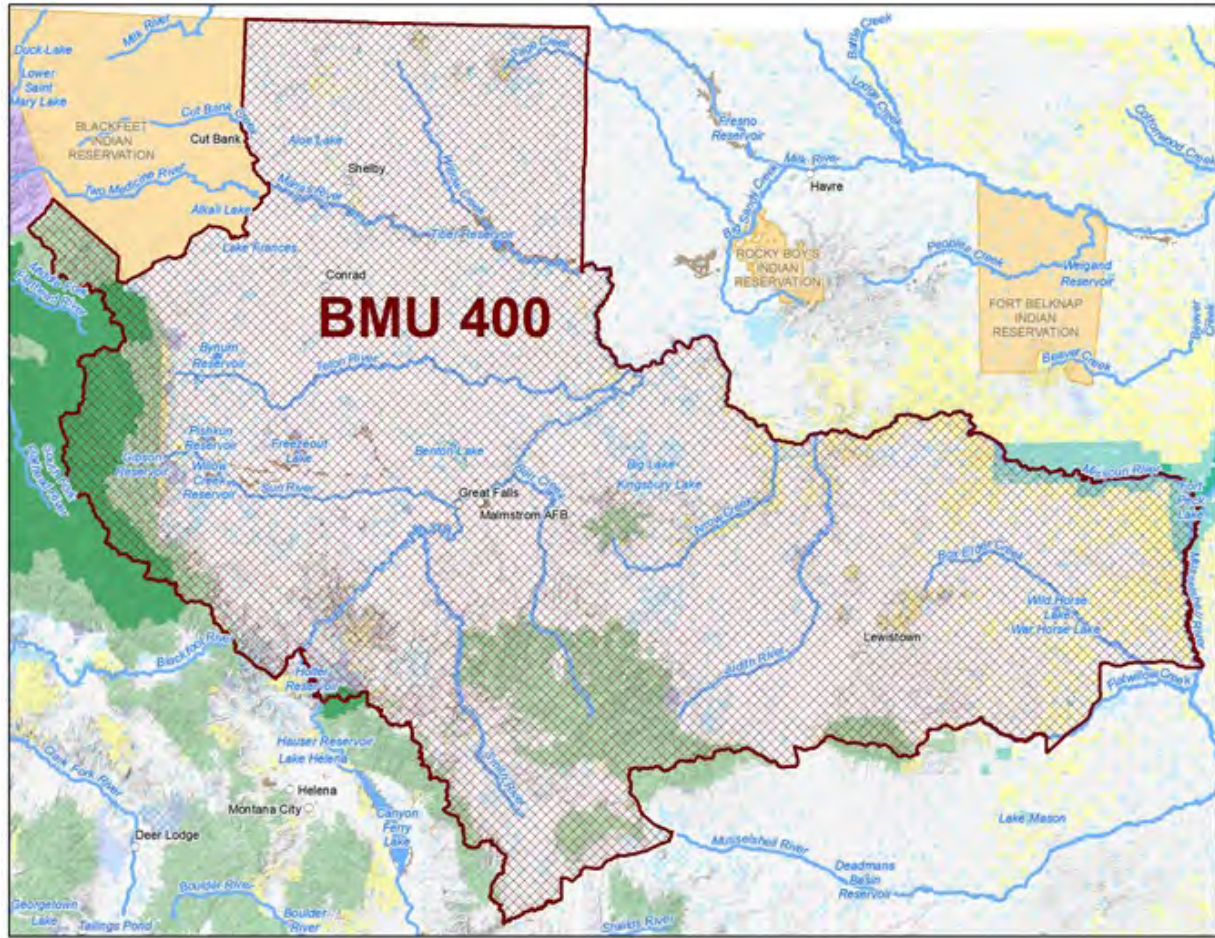
The future application of the FWP black bear IPM will allow for the development of more precise estimates of black bear population and trend in the Region.

R4 Black Bear Harvest			
Year	Female	male	Total
2009	57	94	151
2010	76	127	203
2011	54	102	156
2012	80	159	239
2013	66	124	190
2014	70	136	206
2015	77	146	223
2016	82	141	223
2017	62	132	194
2018	58	125	183
Avg.	68	129	197



Proposed BMU 400.

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5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

R4 black bear regulations, hunter opportunity, and harvest have been consistent over the last 10 years. R4 expects that any future need to decrease or increase annual harvest can be accomplished by adjusting the Regional spring season closing date.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

R4 staff regularly field questions from hunters who are confused by the inconsistent BMU and Regional boundaries. FWP will discuss this proposal with the public during the 2019/20 season setting process.

Proposed BMU 400 legal description

Those portions of Cascade, Chouteau, Fergus, Glacier, Hill, Judith Basin, Lewis and Clark, Liberty, Meagher, Petroleum, Pondera, Teton and Toole counties lying within the following described boundary: Beginning at a point where the eastern boundary of the Blackfeet Indian Reservation intersects the United States-Canada Boundary, then east along said boundary to the Liberty-Hill County line, then south on said line to the Marias River, then southerly along the east bank of said river to the Missouri River, then easterly along the south bank of said river to the Fort Peck Reservoir, then easterly and southerly along the south edge of said reservoir to the Musselshell River, then southerly along the west bank of said river

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to State Route 200, then west along said route to Winnett, then southwesterly on the Winnett to Roundup Road (FAS 244) to its junction with US Highway 87, then north on said highway approximately 4 miles to Flat Willow Creek, then westerly up said creek to the South Fork of Flat Willow Creek, then westerly up said creek to the Red Hill Road, then south along said road to the Snowy Mountain Divide, then westerly along said divide to the head of Meadow Creek, then westerly down said creek to US Highway 191, then south on said highway to the Wheatland- Judith Basin county line, then westerly on said line and subsequently continuing westerly along the Meagher-Judith Basin County line to its junction with the Spring 14 Turn In Poachers – Enough is Enough! Call: 1-800-TIP-MONT (1-800-847-6668) Creek-Whitetail Creek Road (Forest Service Road #274), then south on this road to US Highway 12, then southeasterly on said highway to its junction with Route 294, then southwesterly on said route to its junction with US Highway 89, then southerly along said highway to Sixteen-Mile Creek (near Ringling), then southwesterly along north bank of said creek to the Meagher-Gallatin County line, then west along said line to the Broadwater-Meagher county line, then northwesterly along said line to the Broadwater-Lewis and Clark – Meagher County line, then northwesterly along the Lewis and Clark – Meagher County line until its intersection with USFS Rd #4143, then westerly along said road to the Beaver Creek Road (USFS Road #138), then northwesterly along said road to the Gates of the Mountains Wilderness boundary, then north and west along said line to the posted Beartooth WMA boundary fence near Hump Cabin, then southwesterly along the Willow Creek-Elkhorn Creek Porcupine Creek divide, then southwesterly along said divide to Willow Mountain, then along the Meriwether Canyon-Willow Creek divide, then southwesterly down the Meriwether Canyon-Mann Gulch divide to the mouth of Meriwether Canyon on the east side of the Missouri River, then northerly up Holter Lake and the east shore of the Missouri River to Interstate 15, then southerly along said interstate to the junction with US Highway 287, then south on said highway to the bridge over Lyons Creek, then up said creek and the North Fork of Lyons Creek to the Continental Divide, then northerly along said divide to the Glacier National Park boundary, then easterly and northerly along said boundary to its intersection with the Blackfeet Indian Reservation boundary, then easterly and northerly along said boundary to its intersection with the United States-Canada boundary, the point of beginning.

Citations

- Beck, T. D. I. 1991. Black Bears of West-central Colorado. Colorado Div. of Wildlife Technical Publication 39:1-87.
- Freedman, A. H., K. M. Porter, and M. E. Sundquist. 2003. Life history analysis for black bears in a changing demographic landscape. *Ecological Modeling* 167:47-64.
- Mace, R., and T. Chilton-Radant. 2011. Black Bear Harvest Research & Management in Montana, Final Report. Montana Dept. of Fish, Wildlife & Parks, Wildlife Division, Helena, MT, USA.
- Miller, S. D. 1990. Population management of bears in North America. *Ursus* 8:357-373.

Submitted by: Jay Kolbe

Date: 10/20/2019

Approved: _____

Regional Supervisor / Date

Disapproved / Modified by: _____

Name / Date

Reason for Modification

Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE AND PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Black Bear

Region: 4/5

Hunting District: 411, 420, 580

Year: 2020-2021

1. Describe the proposed season / quota changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.). **REMEMBER THIS STEP IS TO BE ACCOMPLISHED BY THE INITIAL ENTRY INTO THE DATABASE—SO FOLKS CAN START THIS NARRATIVE WITH #2 BELOW.**

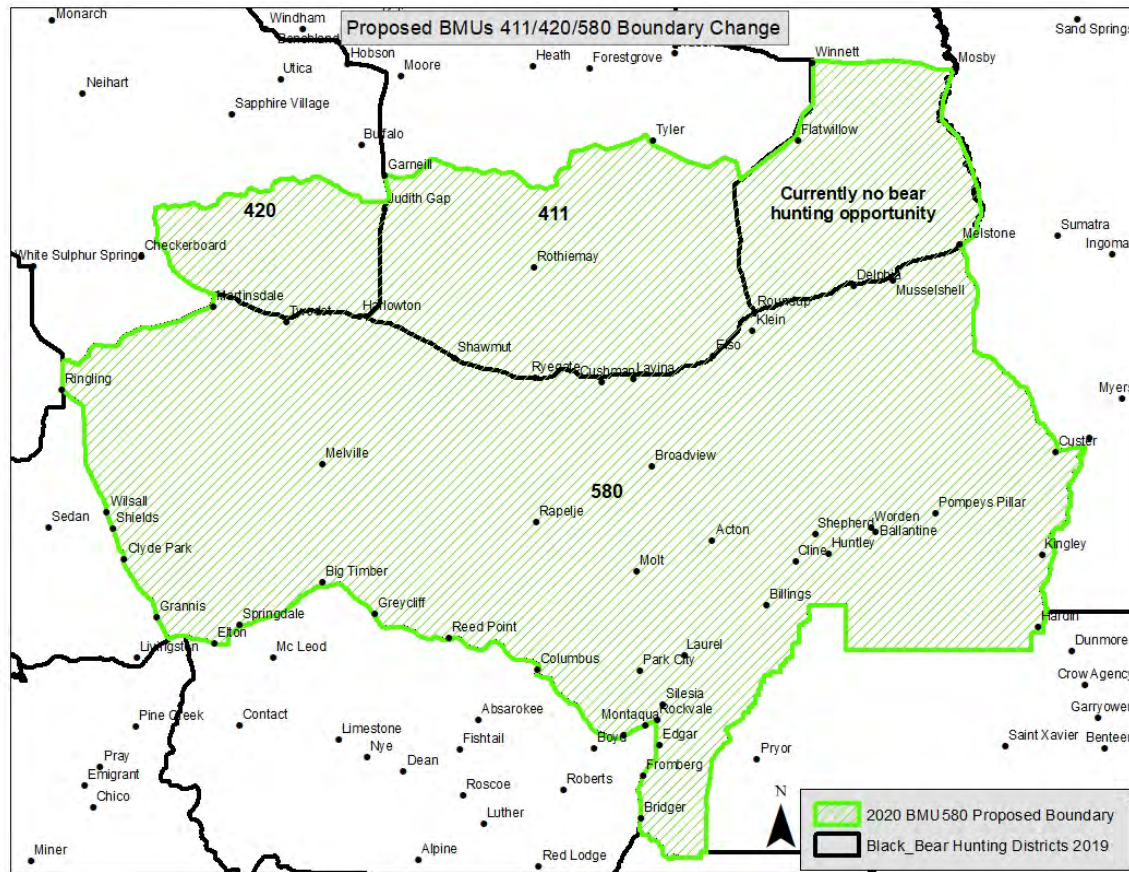
For the upcoming 2020-21 hunting seasons: The proposed action is a boundary change that enlarges black bear BMU 580 and reduces the size of BMU's 411 and 420. The northern boundary of BMU 580 is proposed to move north to the R5 boundary with Region 4 (See Map). This change also created black bear hunting opportunity in the eastern half of deer/elk HD530 that currently does not exist.

The legal description of the new BMU 580 would be:

580 Crazy Mountain: Those portions of Bighorn, Carbon, Golden Valley, Meagher, Musselshell, Park, Stillwater, Sweet Grass, Wheatland and Yellowstone Counties lying within the following described boundary: Beginning at the junction of Interstate 90 and US Highway 89 east of Livingston, then northerly along US Highway 89 to Star Route 294, then northeasterly along said route to US Highway 12, then westerly along said highway to Spring Creek-Whitetail Cabin Road (USFS Road 274), then northerly along said road to its intersection with the Willow Park Road (USFS Road 189), then easterly along said road to its intersection with USFS Trail 603, then easterly along said trail to the Mt. High Lookout Tower, then easterly along USFS Road 382 to a permanent boundary marker (Wheatland/Judith Basin County Line) then northeasterly along the Wheatland County line to US Highway 191, then northerly along said highway to its junction with with Meadow Creek near Garneil, then northeasterly along Meadow Creek to the Snowy Mountain Divide, then easterly along said divide to its intersection with the Red Hill Road, then north along said road to the South Fork Flatwillow Creek, then easterly along said creek to Flatwillow Creek, then easterly along said creek to US Highway 87, then southerly along said highway to Route 244, then northerly along said route to Winnett, then east along State Route 200 to the Musselshell River, then southerly up said river to Melstone, then southeast along the Melstone – Custer road to Interstate 94 near Custer, then east along said interstate to the east shore of the Bighorn River, then south along the east shore to the Crow Reservation Boundary then westerly and southerly along said boundary to the Bowler – Sage Creek Road, then westerly and southerly along said road to the Bowler – Bridger Road, then westerly along said road to its junction with US Highway 310, then northerly along said highway to its junction with US Highway 212, then westerly and southerly along said highway to State Route 421 near Joliet, then westerly and northerly along said route to State Route 78 near Columbus, then northerly along said route to Interstate 90, then westerly along said interstate to its junction with US Highway 89, the point of beginning.

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Figure 1. Proposed BMU580 boundary change with BMUs 411 and 420. Created black bear hunting opportunity in the eastern half of deer/elk HD530.



2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective of this proposed change is to simplify the regulations for the public and internal staff. Currently the northern portion of Region 5 black bears are managed with Region 4 black bears according to geographic mountain ranges. This has caused confusion both internal and external with Region 5 black bear harvest and forms going to Region 4. This proposal in conjunction with the Region 4 proposal to move their BMU boundary to the Region 4 boundary will simplify the regulations.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

The success of this proposal will be measured by quicker processing of MRRE forms related to bears in these northern R5 hunting districts. The success of simplified regulations is difficult to measure but will ideally result in fewer questions from the public regarding where their bear was harvested.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

The BMU 580 harvest history is provided below in Table 1. The Region 5 portion of harvest in HDs 411 and 420 is also provided in Table 2 and Table 3.

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Table 1. BMU 580 black bear quotas, harvest and season dates, 1989-2018.

Harvest					Opening/Closing Dates	
Quota ¹	Spring	Fall	Total			
Year	Tot / F	M / F	M / F	M/F/Tot	Spring	Fall
CRAZY MOUNTAINS BMU 580 (HD 315, 500, 570, 580 & 590) ¹						
1989-HD 580	8/2	3/3	0/0	7/7/14	4/15 – 5/31	No Fall Season
-HD 315	NA	1/3	3/1		4/15 – 6/15	10/22 – 11/26
1990-HD 580	12/4	4/1	2/2	11/8/20 ⁶	4/15 – 5/31	9/01 – 11/25
-HD 315	NA	3/2	2/3/1??		4/15 – 6/15	9/01 – 11/25
1991-HD 580	12/4	2/2	1/ 2	9/8/17	4/15 – 5/31	10/27 – 12/01
-HD 315	NA	4/3	2/1		4/15 – 6/15	9/07 – 12/01
1992-HD 580	12/4	2/2	0/0	10/5/15	4/15 – 5/31	10/25 – 11/29
-HD 315	NA	6/1	2/2		4/15 – 6/15	9/05 – 11/29
1993-HD 580	12/4	0/4	2/3	4/12/16	4/15 – 5/15	10/24 – 11/28
-HD 315	NA	1/3	1/ 2		4/15 – 6/15	9/04 – 11/28
1994	NA	7/5	4/4	11/9/20	4/15 – 5/31	9/15 – 11/27
1995	NA	2/2	5/6	7/8/15	4/15 – 5/31	9/15 – 11/26
1996	NA	7/6	1/ 4	8/10/18	4/15 – 5/31	9/15 – 12/01
1997	NA	3/3	11/5	14/8/22	4/15 – 5/31	9/15 – 11/30
1998	NA	10/3	2/0	12/3/15	4/15 – 5/31	10/01 – 11/29
1999	NA	4/0	5/3	9/3/12	4/15 – 5/31	10/01 – 11/28
2000	NA	9/8	4/1	13/9/22	4/15 – 5/31	10/01 – 11/26
2001	NA	7/5	6/0	13/5/18	4/15 – 5/31	10/01 – 11/25
2002	NA	7/4	5/6	12/10/22	4/15 – 5/31	10/01 – 12/01
2003	NA	10/0	8/5	18/5/23	4/15 – 5/31	10/01 – 11/30
2004	NA	8/14	2/3	10/17/27	4/15 – 5/31	10/01 – 11/28
2005	NA	15/7	3/5	18/12/30	4/15 – 5/31	10/01 – 11/27
2006	NA	6/11	3/3	9/14/23	4/15 – 5/31	10/01 – 11/26
2007	NA	16/8	2/2	18/10/28	4/15 – 5/31	10/01 – 11/25
2008	NA	8/6	5/3	13/9/22	4/15 – 5/31	10/01 – 11/30
2009	NA	13/5	4/2	17/7/24	4/15 – 5/31	10/01 – 11/29
2010	NA	9/3	12/10	21/13/34	4/15 – 5/31	09/04 – 11/28
2011	NA	4/0	11/2	15/2/17	4/15 – 5/31	09/03 – 11/27
2012	NA	13/4	9/7	22/11/33	4/15 – 5/31	09/01 – 11/25
2013	NA	8/4	10/6	18/10/28	4/15 – 5/31	09/07 – 12/01
2014	NA	15/1	15/12	30/13/43	4/15 – 5/31	09/06 – 11/30
2015	NA	13/4	15/8	28/12/40	4/15 – 5/31	09/05 – 11/29
2016	NA	11/5	21/11	32/16/48	4/15 – 5/31	09/03 – 11/27
2017	NA	10/8	12/8	22/16/38	4/15 – 5/31	09/02– 11/26
2018	NA	8/3	21/9	29/12/41	4/15 – 5/31	09/01– 11/25

¹ Prior to 1994 HD 315 (west side Crazy Mtns) and HD 580 (east side Crazy Mtns) had separate bear seasons. HD 315 had regular spring and fall seasons while HD 570/580 had a quota system in place. Beginning with the 1994 season the entire Crazy Mountains (plus some prairie areas to the east) were grouped in a single bear management area with one uniform season type – no quotas were applied.

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Table 2. BMU 411 black bear quotas, harvest and season dates, 1989-2018.

	BMU411 harvest				HD511 portion of BMU411 harvest			HD530 portion of BMU411 harvest			Region 5 portion of BMU 411 harvest		
	Male	Female	Total	% Fem	M	F	Total	M	F	Total	M	F	Total
2000	15	7	22	32	4		4				4	0	4
2001	18	11	29	38	1	1	2		3	3	1	4	5
2002	18	9	27	33				2	1	3	2	1	3
2003	9	7	16	44	1	4	5				1	4	5
2004	27	11	38	29	5	1	6	3	2	5	8	3	11
2005	19	6	25	24	3		3	4		4	7	0	7
2006	19	3	22	14	3		3	2	2	4	5	2	7
2007	16	7	24	29	2	1	3	2	2	4	4	3	7
2008	16	10	26	38	1		1		2	2	1	2	3
2009	20	17	37	46	3	1	4	2	2	4	5	3	8
2010	30	14	44	32	5	3	8	3	3	6	8	6	14
2011	17	6	23	26	1	1	2	1		1	2	1	3
2012	36	17	53	32	9	6	15	6		6	15	6	21
2013	27	9	36	25	4	1	5	1	2	3	5	3	8
2014	38	21	59	36	7	5	12	1	3	4	8	8	16
2015	37	22	59	37	5	2	7	3	3	6	8	5	13
2016	21	22	44	50	1	3	4	3	2	5	4	5	9
2017	27	15	42	36	2	2	4	2	3	5	4	5	9
2018	24	10	34	29	4	3	7	1	1	2	5	4	9
Avg 2009-2018			43	35			7			4			11

Table 3. BMU 420 black bear quotas, harvest and season dates, 1989-2018.

	BMU 420 harvest				HD540 portion of BMU420 Harvest		
	Male	Female	Total	% Fem	M	F	Total
2000	33	15	48	31	1	2	3
2001	26	23	49	47	0	1	1
2002	37	26	63	41	1	1	2
2003	36	17	53	32	3	4	7
2004	29	22	51	43	0	3	3
2005	26	10	36	28	2	2	4
2006	31	13	44	30	3	2	5
2007	26	9	35	26	1	1	2
2008	22	26	48	54	1	1	2
2009	20	12	32	38	3	0	3
2010	38	18	56	32	0	1	1
2011	28	16	44	36	1	1	2
2012	45	18	63	29	6	4	10
2013	36	18	54	33	2	1	3
2014	32	22	54	41	3	2	5
2015	43	20	63	32	3	0	3
2016	57	33	90	37	3	3	6
2017	44	29	73	40	7	3	10
2018	43	22	65	34	4	3	7
Avg 2009-2018			59	35			5

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5. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, temperature/precipitation information).**

This change won't be impacted by any of the factors listed above.

6. **Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

No comments have been received in opposition of the proposal from landowners or sportsmen. This proposal was presented to the area wardens. No conflicts with landowners, sportsmen or other members of the public are anticipated.

Submitted by: Ashley Taylor/October 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Moose

Region: 3

Hunting District: 311 and 304

Year: 2020-2021

1. **Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).**

The proposal is to join moose districts 311 and 304 into one unified moose district, HD 311 (Figure 1). This proposal does not change the total quota of antlered bull licenses, which will remain at 5.

Moose HD 304 only existed as a separate district from 2003 to 2014. It was carved out of larger Moose HD 308, which included much of the area around Big Sky and the West Fork of the Gallatin River, with the intent of regulating hunter dispersal and changing a confusing district boundary. However, it did not sustain the 4 antlered bull licenses offered, and it was combined with HD 311 using a shared license type, the 311-50 from 2014-2019.

Moose HD 311 once sustained harvests as high as 30 either-sex licenses (1973-1975) although by 1985 antlerless moose opportunity was removed. HD 311 licenses were reduced to 5 antlered bulls in 2011. From 2014-2019, moose 311 and moose 304 have functioned as a single unit with 5 antlered bull licenses.

The 2014 proposal to allow the 311-50 license to be valid in both HD 304 and HD 311, with a total of 5 licenses, met with success in bringing number of licenses allowed in line with realistic opportunity for hunters to harvest moose. Hunter success rates improved from 46% (2009-2013) to 76% (2014-2018).

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This 2020 proposal formalizes the union of HD 311 and HD 304, dissolving HD 304 into HD 311. The resulting moose HD 311 will have very similar boundaries to deer and elk HD 301, but we could not use this administrative name as a moose HD 301 currently exists in Beaverhead County.

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

The proposed objective is to simplify the moose regulations for hunters.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

The proposal will be inherently successful as it will simplify the regulations from 2 districts into 1 district.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

Lacking survey and inventory for moose, evaluation of seasons is imperfectly analyzed through hunter harvest data and hunter effort. The "rule of thumb" is to see harvest success rates average 80% through the years. This metric is imperfect but is the only one at hand for many districts (DeCesare et al. 2016*).

With the effective combination of these two districts under the 311-50 license for the last 5 years, average success rates improved from 46% to 76%. Hunter effort also declined from an average of 11.7 days of effort per hunter in the 5 years prior to the change to 8.7 days of effort in the 5 years after the change.

*DeCesare, N., J. Newby, V. Boccadori, T. Chilton-Radandt, T. Their, D. Waltee, K. Podruzny, and J. A. Gude. 2016. Calibrating minimum counts and catch-per-unit-effort as indices of moose population trend. *Wildlife Society Bulletin* 40: 537-547.

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

Moose mortalities have been opportunistically documented since 2012. Vehicle-related mortalities are a dominant issue as well as disease/parasites, predation, poaching, and fence entanglement. Vegetation changes, such as conifer encroachment into meadows, willows, and aspen stands, could also impact moose populations.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

This proposal was vetted through hunter harvest reports and through dedicated communications to more than 200 sportsmen and women, agency personnel, NGOs, and landowners. Comments received back included appreciation for making larger, more simple districts and regulations.

Boundary Change Justifications December 2019

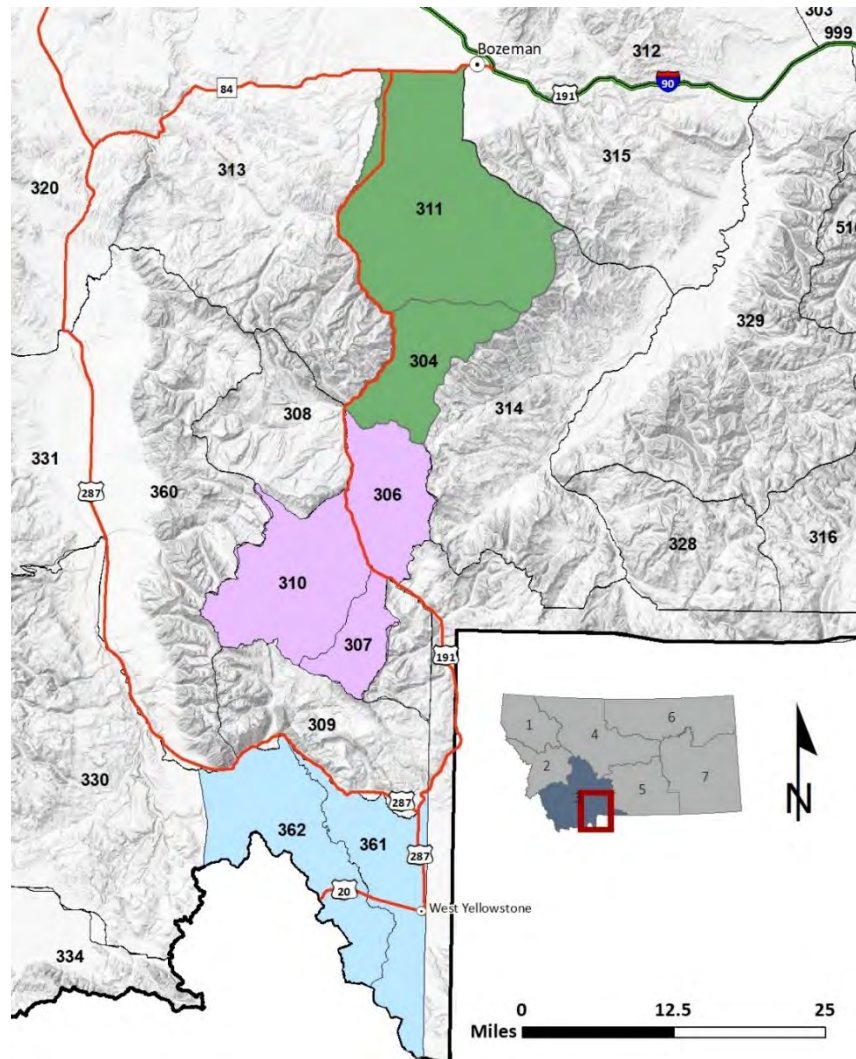


Figure 1: Proposed combinations of Bozeman Area moose districts. Current district boundaries are outlined in grey, proposed combinations are shaded the same color. This proposal is relevant to HD 311 and HD 304, in green.

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Moose

Region: 3

Hunting District: 310, 306, 307

Year: 2020-2021

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

The proposal is to join moose districts 310, 306, and 307 into one unified moose district, HD 310 (Figure 1). This proposal does not change the total quota of antlered bull licenses, which will remain at 1.

Boundary Change Justifications December 2019

Moose HD 306 and HD 307 were created out of Moose HD 311, HD 309, and HD 310 in 1978 and 1984 respectively. At the time, moose numbers were high: Moose HD 306 offered 10 antlered bull licenses and 3 either-sex licenses and Moose HD 307 offered 5 antlered bull and 2 either-sex licenses. These districts were small: Moose HD 307 was 37mi² district and Moose HD 306 was 73mi².

After HD 306 and HD 307 were created, Moose HD 310 (122mi²) still allowed 25 licenses for many years. Either-sex licenses were removed in all districts in 2000, license numbers dropped to 5 total antlered bull licenses across all districts, and then all districts were closed to hunting in 2010-2011. The three districts were opened in combination, allowing 1 antlered bull license (the 310-50) to be valid in all three districts ever since 2012. This new license has seen 100% success rate each year, and trophy moose quality appears to be improving.

This 2020 proposal formalizes the union of HD 306, 307, and 310 back into Moose HD 310. The resulting moose HD 310 will be slightly different than the boundaries of Deer and Elk HD 310. Elk HD 310 includes the Gallatin Special Management Area (GSMA), which is closed to all elk hunting except for 5 special license holders. The GSMA is closed to moose hunting. When Moose HD 307 was originally drawn, its boundaries excluded the GSMA, but Moose HD 306 did not exclude these boundaries. This proposal will draw the new HD 310 completely excluding the GSMA to prevent confusion.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective of the proposed change is to simplify the moose regulations for hunters reading the regulations, applying for licenses, and for interpreting district boundaries.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

The proposal will be inherently successful as it will simplify the regulations from 3 districts into 1 district and will redraw district boundaries to be nearly identical to Deer and Elk HD 310 yet excluding the GSMA to further prevent confusion with reading and interpreting district boundaries.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Lacking survey and inventory for moose, evaluation of seasons is imperfectly analyzed through hunter harvest data and hunter effort. The "rule of thumb" is to see harvest success rates average 80% through the years. This metric is imperfect but is the only one at hand for many districts (DeCesare et al. 2016).

With the effective combination of these three districts under the 310-50 license for the last 7 years, average success rates have been 100% on the one license offered. There may be potential for more licenses to be issued in the future, but MFWP is interested in allowing the bull population to continue to grow to be a source for the adjacent areas that are not doing as well.

5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

Moose mortalities have been opportunistically documented since 2012. Vehicle-related mortalities are a dominant issue as well as disease/parasites, predation, poaching, and fence entanglement. Vegetation changes, such as conifer encroachment into meadows, willows, and aspen stands, could also impact moose populations.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

This proposal was vetted through hunter harvest reports and through dedicated communications to more than 200 sportsmen and women, agency personnel, NGOs, and landowners. Comments received back included appreciation for making larger, more simple districts and regulations. Notably, hunter comments

Boundary Change Justifications

December 2019

are divided regarding the number of licenses offered in the district. Some hunters want to see more moose opportunity through raising the number of licenses offered in HD 310. Others want to stay conservative to let moose potentially move into adjacent districts 309, 360, and 308, which are not doing as well. Still others prefer to see less opportunity but more trophy quality.

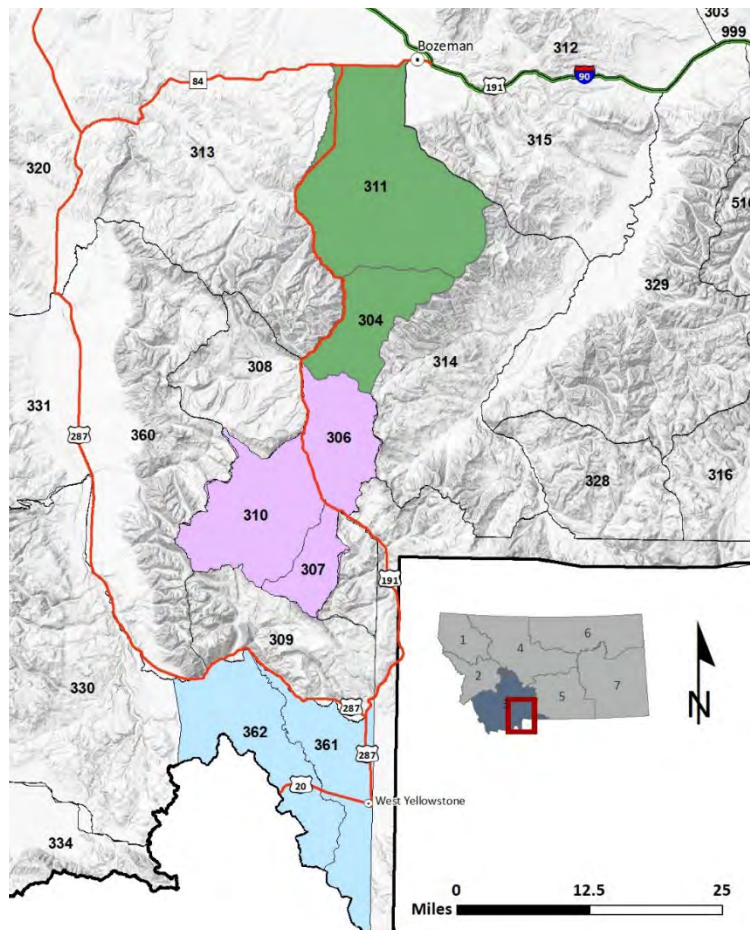


Figure 2: Proposed combinations of Bozeman Area moose districts. Current district boundaries are outlined in grey, proposed combinations are shaded the same color. This proposal is relevant to HD 310, 306, and 307, in purple.

Literature Cited:

DeCesare, N., J. Newby, V. Boccadori, T. Chilton-Radandt, T. Their, D. Waltee, K. Podruzny, and J. A. Gude. 2016. Calibrating minimum counts and catch-per-unit-effort as indices of moose population trend. *Wildlife Society Bulletin* 40: 537-547.

MONTANA FISH, WILDLIFE & PARKS

HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Moose

Region: 3

Hunting District: 361 and 362 (and small boundary change with HD 309)

Year: 2020-2021

Boundary Change Justifications

December 2019

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

The proposal is to join moose districts 361 and 362 into one unified moose district (Figure 1) which will have the same boundaries as deer and elk district 361. The alignment of the districts will modify <2 square miles of land in the Grayling Creek area, also influencing moose HD 309 to the north, making the new moose boundaries along the creek rather than the highway, giving the new moose district 361 the same legal description as deer and elk HD 361 (Figure 2). This proposal does not change the total quota of antlered bull licenses, which will remain at 4.

This proposal returns the moose district 361 to the same approximate boundaries it once had in 1983 and prior. The district was split along the South Fork of the Madison in 1984 to regulate hunter dispersal on the east and west sides of this South Hebgén unit. At the time, moose numbers were high, and up to 10 either-sex licenses and 15 antlered bull licenses were allowed in HD 361. By 1991, the either-sex opportunity was removed, and 5 antlered bull licenses were maintained in HD 361 until 2016. HD 362 never allowed high harvest, with 5 antlered bull licenses and 2 either-sex licenses. By 1991, the either-sex opportunity was removed in HD 362 as well, and 3 antlered bull licenses were maintained until 2012, dropping to 1 by 2015.

By 2016, hunter success rates in both districts, especially HD 362, had dropped significantly enough that MFWP proposed to essentially combine the districts by introducing the 399-50 license, valid for antlered bull in either HD 361 or HD 362, with a quota of 4. That quota was established based on the average harvest at the time. Comparing the success rates of the 3 years prior to this license type establishment with the 3 years after its establishment demonstrates its effectiveness: success improved from 30% (2013-2015) to 89% (2016-2018).

The combination of districts under the 399-50 license met its proposed objective. This proposal for the 2020-2021 season makes the combination of districts official by dissolving HD 362 into HD 361, making one larger moose district, HD 361. This proposal will simplify regulations removing an unnecessary boundary and making the license number the hunter applies for the same as the unit he or she is hunting (i.e., now it will be a 361-51 license for HD 361). It will further simplify regulations by aligning the moose district with the deer-elk district of the same name at their common boundary.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The proposed objective is to simplify the moose regulations for hunters reading the regulations, applying for licenses, and for interpreting district boundaries.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

The proposal will be inherently successful as it will simplify the regulations from 2 districts into 1 district, from an uncommon boundary to a common one, and from an administrative license number to a district-specific license number.

4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Lacking survey and inventory for moose, evaluation of seasons is imperfectly analyzed through hunter harvest data and hunter effort. The "rule of thumb" is to see harvest success rates average 80% through the years. This metric is imperfect but is the only one at hand for many districts (DeCesare et al. 2016). However, for districts with few licenses, small sample sizes results in difficulty when estimating harvest success rates (i.e., HD 362 has 1 license so in any year harvest success can only be 100% or 0). Hunter effort measures are also biased by that one individual's desires and circumstances in any year. Allowing

Boundary Change Justifications

December 2019

licenses to be valid over a larger landscape allows better interpretation of success and effort over time: with 4 licenses, we may see 100%, 75%, 50%, 25%, or 0% success.

With the effective combination of these two districts under the 399-50 license for the last 3 years, we noted average harvest success rates of 89%. The districts are currently meeting objective.

- 5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

Since 2012, moose mortalities have been opportunistically documented. Vehicle-related mortalities are a dominant issue as well as disease/parasites, predation, poaching, and fence entanglement.

Moose hunting in both areas is opportunistic. Small districts, moose are thought to move between Island Park Idaho and Yellowstone National Park through this area.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

This proposal was vetted through hunter harvest reports and through dedicated communications to more than 200 sportsmen and women, agency personnel, NGOs, and landowners. Comments received back included appreciation for making larger, more simple districts and regulations.

Literature Cited:

DeCesare, N., J. Newby, V. Boccadori, T. Chilton-Radandt, T. Their, D. Waltee, K. Podruzny, and J. A. Gude. 2016. Calibrating minimum counts and catch-per-unit-effort as indices of moose population trend. *Wildlife Society Bulletin* 40: 537-547.

Boundary Change Justifications December 2019

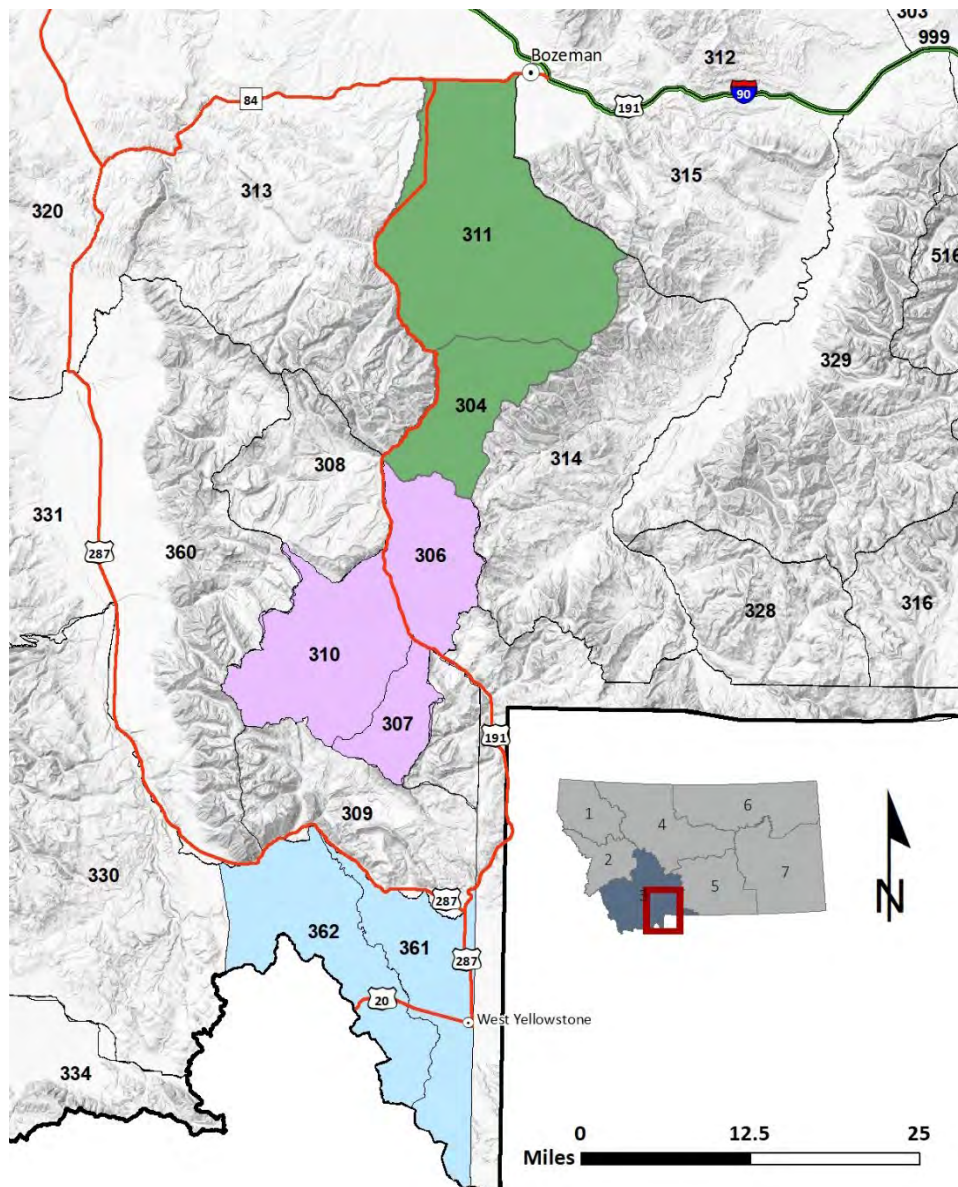


Figure 3: Proposed combinations of Bozeman Area moose districts. Current district boundaries are outlined in grey, proposed combinations are shaded the same color. This proposal is relevant to HD 362 and HD 361.

Boundary Change Justifications December 2019

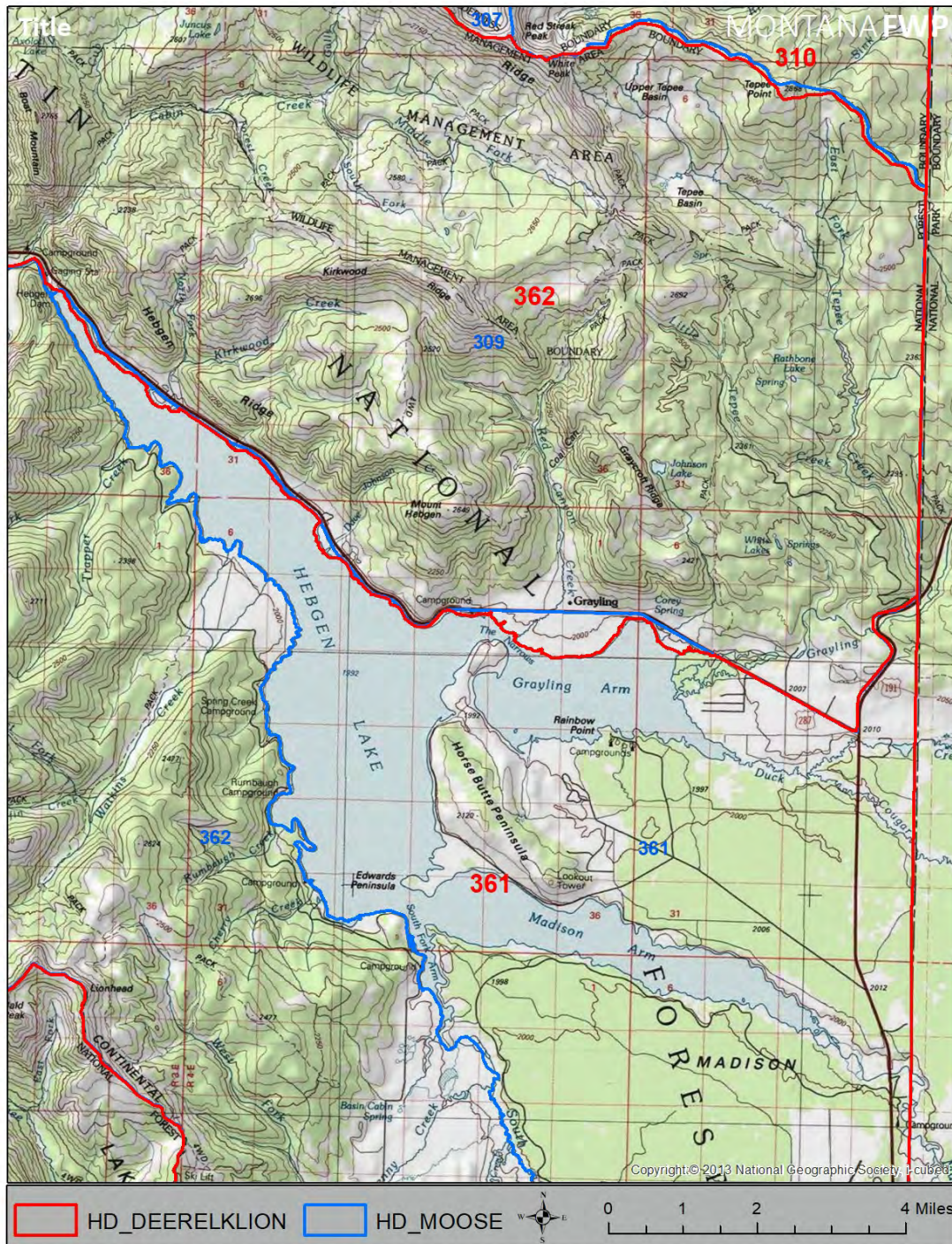


Figure 4: Proposed boundary adjustment between Moose HD 361 (blue) to align with Deer and Elk HD 361 (red). Deer and Elk districts use the north shore of Hebgen Lake whereas Moose districts had used the highway as a boundary. This district adjustment will influence moose HD 309 as well.

Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Moose
Region: 4
Hunting District: 447 (NEW)
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.). **REMEMBER THIS STEP IS TO BE ACCOMPLISHED BY THE INITIAL ENTRY INTO THE DATABASE—SO FOLKS CAN START THIS NARRATIVE WITH #2 BELOW.**

It is proposed to create a new moose Hunting District in the Highwood Mountains (HD 447) for the 2020 season, offering 1 bull moose license and a quota range of 1 -4.

2. **What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

Objective of the proposal is to allow moose hunting and harvest opportunity as populations grow to huntable levels. The proposal would offer 1 bull moose license, which would also allow populations to continue to grow and expand, limiting harvest to male moose. Season structure would follow existing statewide moose season regulations that open on September 15 and closing concurrent to the general season. The proposed moose HD 447 encompasses all of Deer/Elk HD 447(Appendix A).

3. **How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

The proposed new moose HD will allow a new moose hunting and harvest opportunity. Demand for moose, sheep and goat licenses are very, very high and in reality, are a once in a lifetime experience.

4. **What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

There is no official moose survey for the Highwoods, although incidental FWP staff, USFS staff, and hunter observations have greatly increased over the last 10 years. During FWP hunter survey questionnaires from 2012 – 2016, hunters reported 37, 39, 50, 56 and 29 moose observed in HD 447 (respectively). 2016 was not a full survey year. The past two winters elk surveys, 10 total moose were observed wintering in the interior of the Highwoods. Moose populations have also increased the last 20 years in North Central Montana, now having new moose seasons in Region 6 (HD 600) and Sweetgrass Hills (HD 401) and Rocky Mountain Front (HDs 441 and 415) since 2008.

5. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).**

Year-round moose habitat exists in the Highwood Mountains, both on public and private lands. The Highwoods have on the highest percentages of aspen communities in the Lewis and Clark National Forest system. Large riparian drainages such as Shonkin, Willow, Highwood, Timber, Cottonwood, Arrow and Little Belt Creeks provide good moose habitat. The interior of the mountain range provides a mixed conifer forest providing year-round and security habitats. It is estimated that about ¾ of the moose in the Highwoods are located on public lands.

Boundary Change Justifications December 2019

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

Area game wardens Keith Knighton, Dave Holland, Kqyn Kuka, Trenton Farmer, Kyle Anderson and Jim Smolczynski were contacted with the proposal, all in full support. Stanford USFS biologist David Kemp also voiced support for the proposal. Five area Landowners with the majority of moose habitat (Belt side of HD) were contacted as well, all supporting the license and access opportunity. Area sportsmen groups Russell Country Sportsmen, Great Falls Chapter Safari Club International, Montana Sportsmen Alliance were contacted regarding the proposal, all in full support.

Submitted by: Cory Loecker, Great Falls Area Wildlife Manager

Date: 10/5/2019

Approved: _____
Regional Supervisor / Date

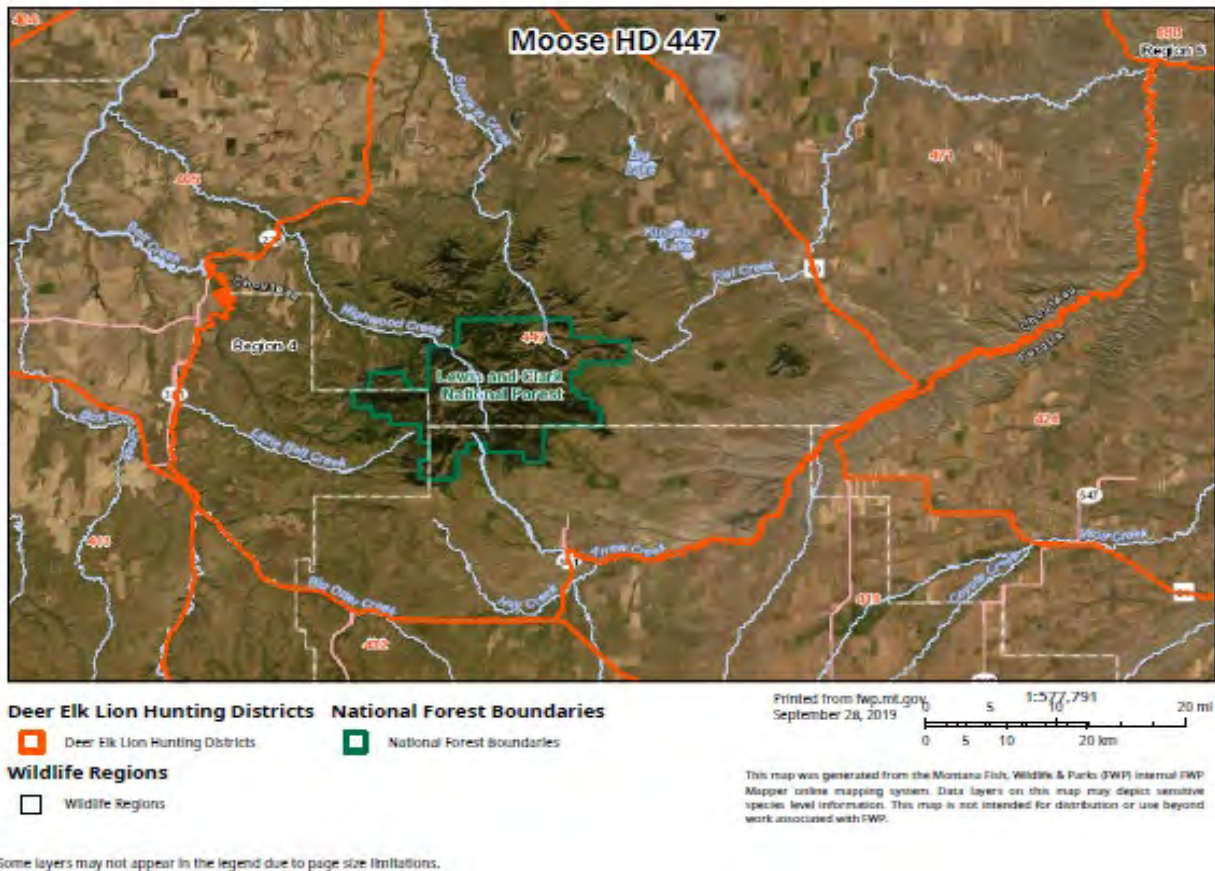
Disapproved / Modified by: _____
Name / Date

Reason for Modification:

Boundary Change Justifications

December 2019

Appendix A. Proposed moose HD 447 boundary (also deer/elk HD 447 boundary)



MONTANA FISH, WILDLIFE AND PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Bighorn Sheep
Region: 4
Hunting District: 482
Year: 2020-2021

1. Describe the proposed season / quota changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.). **REMEMBER THIS STEP IS TO BE ACCOMPLISHED BY THE INITIAL ENTRY INTO THE DATABASE—SO FOLKS CAN START THIS NARRATIVE WITH #2 BELOW.**

For the upcoming 2020-21 hunting seasons:

- Change the legal description of bighorn sheep HD 482 to match language used for deer/elk/lion districts 417 and 426, and bighorn sheep HD 680, as well as the Fergus County line.

Modifications to the 2020-21 Montana Bighorn Sheep Legal Descriptions would read (changes highlighted in **RED**):

Boundary Change Justifications

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482 Fergus: That portion of Fergus County lying within the following-described boundary: Beginning at US Highway 191 and the Missouri River at James Kipp Recreation Area, then west along ~~the north bank of~~ said river to Arrow Creek, then south up said creek to Route 80, then southeast along said route to Route 81, then east along said route to US Highway 191, the northeast along said highway to the ~~north bank of the~~ Missouri River at James Kipp Recreation Area, the point of beginning.

2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The objective of this proposed change is to clean up boundary language for bighorn sheep HD 482. As currently written, a 482 hunter could technically shoot a bighorn ram standing on the north bank of the Missouri River that is by all intents and purposes in HD 680. Legal descriptions for each of these HDs allows for an overlap, given that HD 680's south boundary is technically the midpoint of the river/Fergus-Blaine county line. Changing HD 482's legal description from "the north bank" of the Missouri River to just "the Missouri River" will get rid of this potential issue and the overlap, as well as make the language consistent across both sheep HDs. Language for HD 482 would also be consistent with Deer/Elk/Lion HDs 417 and 426, which overlap HD 482.

680 Chouteau-Blaine-Phillips: Beginning at Coal Banks Landing along *the Missouri River*, then southeasterly along the northern boundary of Upper Missouri River Breaks National Monument (UMRBNM) boundary to the intersection with Montana Highway 236 north of Judith Landing, then northwest along Highway 236 to the Eagleton Road, then northeast along the Eagleton Road to its junction with the Cow Island Trail, then east along the Cow Island Trail to the junction with the Lloyd Road, then north along the Lloyd Road to Cow Creek, then southeast along Cow Creek to Suction Creek, then northeast along Suction Creek to Little Suction Creek, then east along Little Suction Creek to the Fort Belknap Indian Reservation boundary, then south and east along said boundary to the intersection with Montana Highway 66, then south along Highway 66 to the junction with US Highway 191, then southwest along Highway 191 to its intersection with *the Missouri River*, then northwest along the Missouri River to Coal Banks Landing, the point of beginning.

417 Armells Creek: Those portions of Fergus County lying within the following-described boundary: Beginning at Hilger, then easterly and northerly on US Highway 191 to *the Missouri River*, then westerly up said river to the Stafford Ferry Road, then south on said road to the Knox Ridge Road, then westerly on said road to Route 236 at Winifred, then south on said route to US Highway 191 at Hilger, the point of beginning.

426 Winifred: Those portions of Fergus and Judith Basin Counties lying within the following-described boundary: Beginning at Suffolk, then north following the Winifred Road (FAS 236) to Winifred, then northeasterly on the DY Trail to the Stafford Ferry Road, then northerly on said road to *the Missouri River*, then up said river in a westerly direction to the mouth of Arrow Creek, then up said creek to State Route 80, then south on said route to State Route 81, then easterly along said route near Denton to the Plum Creek County Road, then northerly and easterly along said road to the Salt Creek Road, then southeasterly along the Salt Creek Road to its junction with the Winifred Road (FAS 236) approximately three miles north of Hilger, then north on the Winifred Road to Suffolk, the point of beginning.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.

There are no real metrics of success associated with this proposal. It is more of a "housekeeping" proposal.

4. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e.,

Boundary Change Justifications December 2019

habitat security, hunter access, vegetation surveys, weather index, snow conditions, temperature/precipitation information).

N/A

5. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

The Lewistown-area game warden sergeant originally brought this proposal forward. Enforcement and wildlife staff worked together to clean up boundary legal description language.

Submitted by: Sonja Andersen/October 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

MONTANA FISH, WILDLIFE & PARKS HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Bighorn Sheep

Region: 6
Hunting District: 622

Year: 2020-2021

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposal aims to extend the eastern boundary of the bighorn sheep HD 622 to run along the current border for the Deer/Elk HD 631 (Fig 1). This will simplify regulations by using a known boundary already and will account for some recent distribution that has occurred east of the current bighorn sheep hunting boundary. Additionally, the restriction of where the adult ewe license is valid (i.e., Valid west of Timber Creek and east of Reynolds Hill (Fourchette Bay) Rd.) will be removed and the adult ewe license holder will be allowed to harvest an ewe anywhere in the new proposed hunting district.

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Legal Description for proposed Bighorn Sheep HD 622 (Figure 1) and proposed quotas and quota ranges:

Those portions of Valley and Phillips Counties lying within the following-described boundary: Beginning at the Bone Trail Boat Ramp on Fort Peck Reservoir then northeasterly along said reservoir to CMR Road 516, then northwest along said road to Murray Road, then northerly along said road to Willow Creek Road, then northeasterly along said road to Stonehouse Road, then northwesterly along said road to Ridge Road, then north up said road to the Triple Crossing Road, then west on said road to the Larb Creek-Content Road, then northwesterly along said road to Content Road, then southwesterly along said road to Sun Prairie Road, then southerly along said road to the First Creek Hall Road, then northwesterly along said road to First Creek Hall, then westerly along said road to Midale Road, then southerly along said road to CMR Boundary Road 212, then easterly along said road to CMR Road 201, then southeasterly along said road to CMR Road 219, then southwesterly along said road to Fort Peck Reservoir, then easterly along said reservoir to the Bone Trail Boat Ramp, the point of beginning.

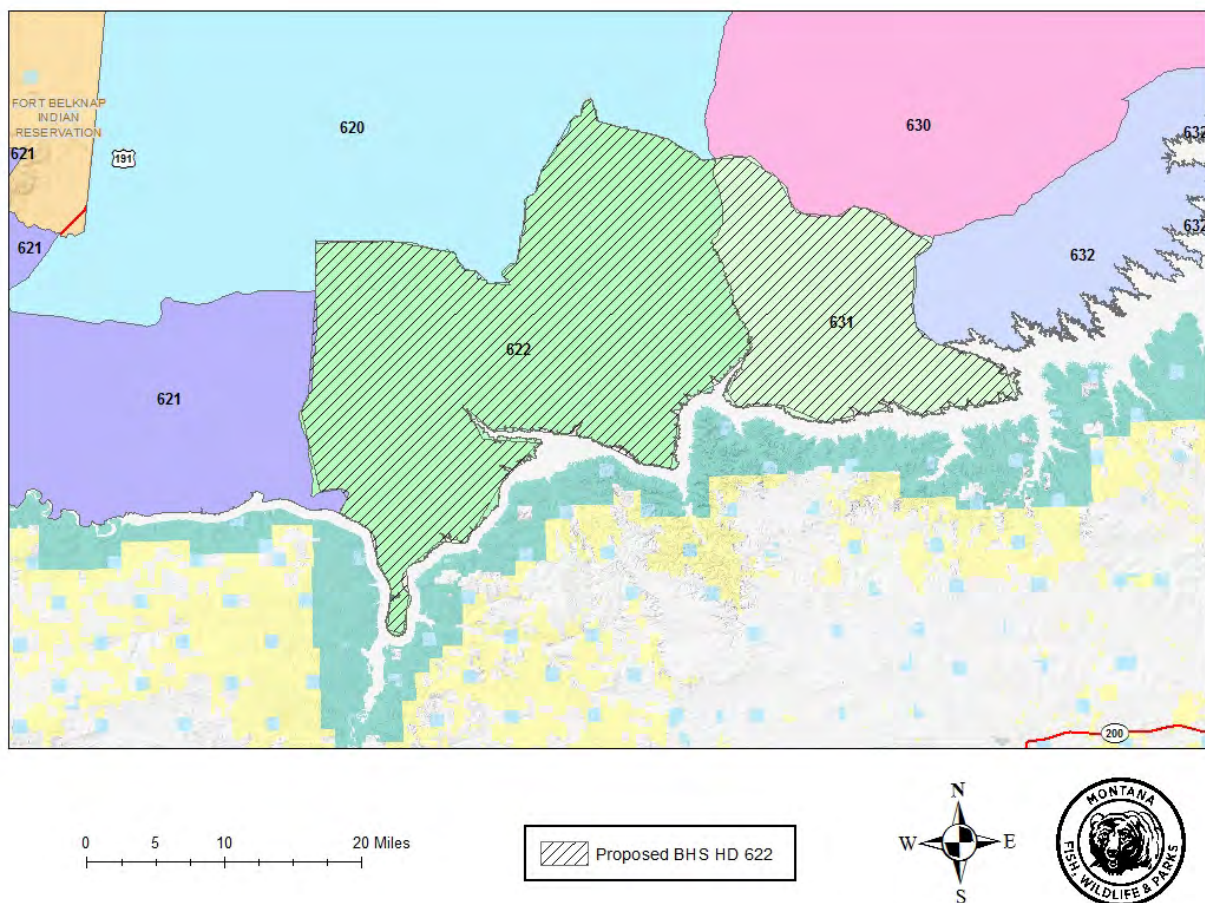


Figure 1. Current deer/elk hunting districts relative to the proposed bighorn sheep HD 622.

Boundary Change Justifications

December 2019

- 2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.**

The overall objective is simplification of the HD boundary and license language to expand the area for where the licenses are valid to account for more opportunity as distribution of bighorn sheep moves.

- 3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints, etc.**

Success of this proposal will be measured by the annual bighorn sheep aerial survey flight to gather and compare trend data for the sheep population as a whole as well as sub-populations of sheep based on their location in the HD. Additionally, success will be monitored through the annual hunter harvest surveys and through the overall simplification of regulations by removing restrictions and expanding the HD to align with other species HDs.

- 4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).**

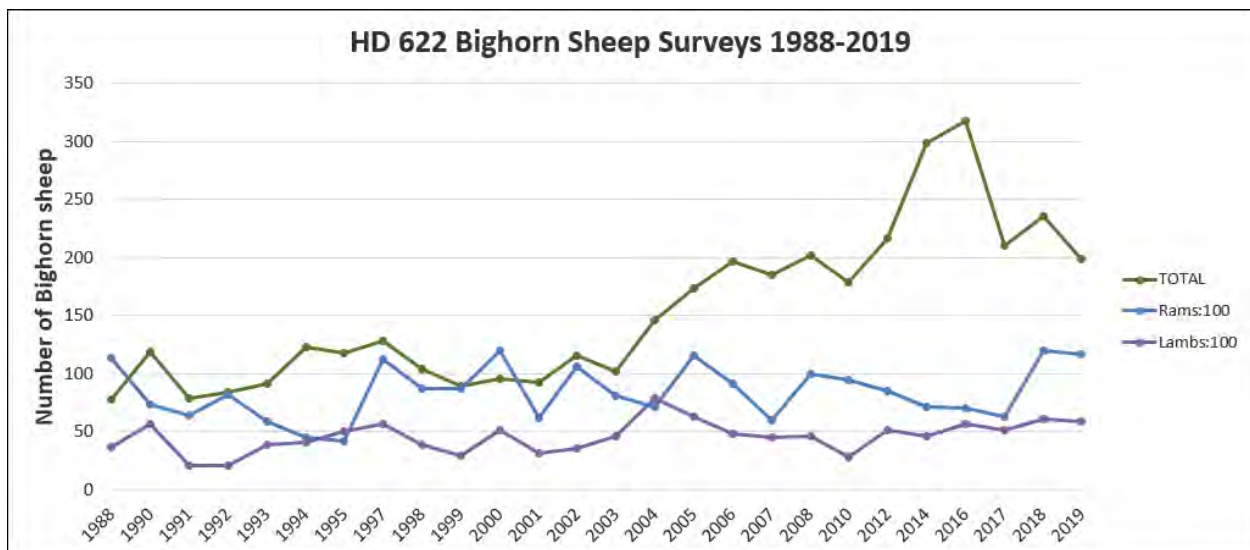


Figure 2. Region 6 Bighorn Sheep Survey data in HD 622, 1988-2019.

Total bighorn sheep observed in HD 622 during the 2019 survey was 26% above the long-term average and is currently right at the upper objective as outlined in the Montana Bighorn Sheep Conservation

Boundary Change Justifications December 2019

Strategy (2010), lamb ratios were 59 lambs: 100 ewes (37% above LTA) and the ram ratio of 117 rams: 100 ewes was 39% above LTA.

2017							
Area	Ewes	Lambs	< ¼	¼ - ½	½ - ¾	¾ - 1	Total
M/B Buttes	0	0	0	0	0	0	0
Larb Hills*	27	20	3	2	0	0	52
Iron Stake*	53	22	11	12	9	17	101
E. Timber Cr.	18	9	0	2	3	3	35
Total	98	51	14	16	12	20	211
2018							
Area	Ewes	Lambs	< ¼	¼ - ½	½ - ¾	¾ - 1	Total
M/B Buttes	0	0	0	0	0	0	0
Larb Hills*	32	22	5	8	8	23	98
Iron Stake*	31	18	6	7	17	15	94
E. Timber Cr.	21	11	4	0	1	7	44
Total	84	51	15	15	26	45	236
<i>*Split at Blue Ridge</i>							
2019							
Area	Ewes	Lambs	< ¼	¼ - ½	½ - ¾	¾ - 1	Total
M/B Buttes	0	0	0	0	0	0	0
Larb Hills*	22	15	5	12	9	12	75
Iron Stake*	29	14	2	6	16	8	75 (81)**
E. Timber Cr.	19	12	5	1	1	5	43
Total	70	41	12	19	26	25	193(199)
<i>*Split at Blue Ridge</i>							
<i>**An additional 6 unclassified ewes/lambs</i>							

Figure 3. Region 6 Bighorn Sheep Survey data in HD 622 by distribution, 1988-2019.

- Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

Boundary Change Justifications December 2019

Overall the weather has been favorable, and the drought of 2017 followed by the hard winter did not appear to have an impact on recruitment or survival of bighorn sheep in the area. Public hunting access and opportunity continues to be very good and expanding the district boundary will add additional opportunity to some ram groups that make movements outside the current boundary. Also, removing the adult ewe license geographic restriction will simplify the regulations and reduce confusion for hunters while afield and will increase opportunity as well.

6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

Multiple contacts have been made with the public both during public meetings (Breaks Elk Working Group in 2019) as well as during general conversations with sheep license holders as well as other hunters and most seemed to be in favor for the proposed changes. FWP continues to work cooperatively with the Charles M. Russell staff and they were emailed to discuss these proposed changes and they did not have any objections to the proposed changes and wanted to communicate that they want to continue supporting sheep populations at or near biological carrying capacity in all available sheep habitat on the CMR with proper management practices and preventions towards issues such as diseases. CMR staff do not want to inhibit sheep from colonizing currently unused sheep habitat and if the sheep can fill these previously unoccupied areas while also supporting some hunter harvest then that works out well.

Submitted by: Brett Dorak, Malta Area Wildlife Biologist

Date: 10/22/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____

Name / Date

Reason for Modification:

Boundary Change Justifications

December 2019

MONTANA FISH, WILDLIFE & PARKS SEASON/QUOTA CHANGE SUPPORTING INFORMATION

Species: Mountain Goat
Region: 3
Hunting Districts: 327 and 328
License Year: 2020-2021 biennium

1. Describe the proposed season /quota changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.)

Mountain goats were introduced to the Madison Range with a series of transplants in 1947, 1950, and 1951. Their populations erupted, and a hunting season was established by 1964 with 5 licenses in the Spanish Peaks and 10 licenses in 1965 across the rest of the Madison Range. By 1981, biologists carved the one large district south of the Spanish Peaks into several smaller units with the goal of regulating hunter dispersal across the Madison Range. Across the Madison Range, these eruptive populations sustained years of generous harvest. However, by 2006-2007, biologist Craig Jourdonnais recognized population declines in some areas, and responded by decreasing harvest rates. In most areas, the counts rebounded, and in some areas, numbers of licenses were once again increased. In other areas, further restriction and consideration are still needed to ascribe appropriate harvest rates.

Hunting Districts (HDs) 327 and 328 lie on the south end of the Madison Range. HD 328 is a small unit (40 mi²) directly north of Quake Lake, and HD 327 sits north of 328. Current harvest rates allow 2 licenses in HD 327 and 2 in HD 328. These two areas have not shown high enough counts to justify current harvest rates. Further, HD 328 may require special consideration as it shows a high proportion of nannies in harvest, which may correlate to a nanny winter range.

MFWP proposes to combine the two districts HD 327 and HD 328 and offer a total of 2 licenses. This will reduce the total number of licenses from 4 to 2, but represents a 6% harvest rate on observed goats, which is within the range of acceptable harvest rates (Festa-Bianchet and Côté 2008, McWhirter and Roop 2007). The new, combined mountain goat district will retain the name HD 327.

2. What is the objective of this proposed change?

The primary objective of the proposed change is to introduce a sustainable harvest rate commensurate to the number of mountain goats which use the areas inside the hunting districts. The secondary objective is to reduce the proportions of nannies in harvest in the new HD 327.

3. How will the success of this proposal be measured?

The success will be measured by each objective separately.

Objective 1: if the number of mountain goats counted remains stable or increases in subsequent years' survey efforts, then the proposal was clearly successful in balancing hunter harvest with mountain goat production.

Objective 2: if the proportion of nannies in harvest is reduced from current (0.45) to anything less than 0.3 (Bridger/Madison average). Note that with only 2 licenses available, it will take at least 5-10 years to have a meaningful new measurement of proportion females in harvest. Each individual year, there could only be 0, 50, or 100% nannies in harvest.

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4. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Counts in HD 327 declined from the 1980s and 1990s through 2010, and then appear to show a rebound perhaps in part due to the reduction of licenses from 8 to 4 in 2006. The recent 2019 count in HD 327 was good, at 35 total individuals (Figure 1) but hunter harvest success in HD 327 has been poor (Table 1). Counts in HD 328 have clearly declined from the 1990s.

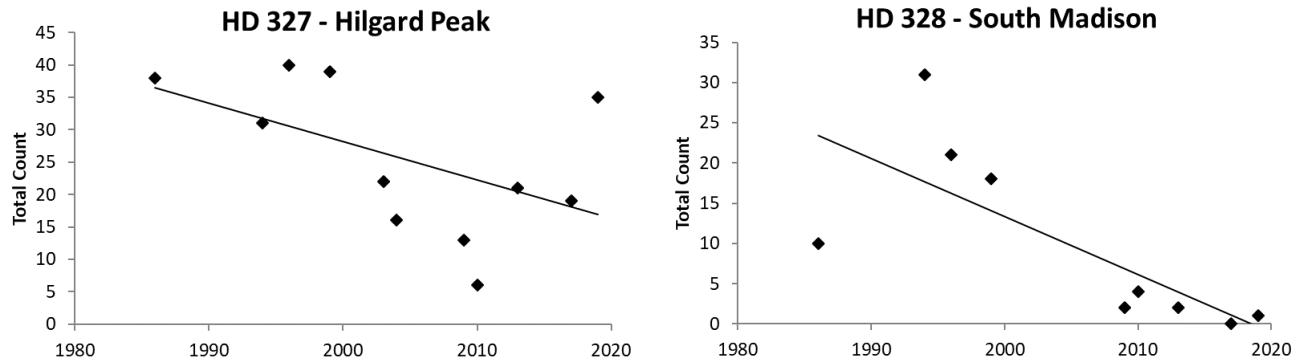


Figure 5: HD 327 (left) and HD 328 (right) mountain goat counts from helicopter, fixed-wing, or opportunistic surveys.

Table 1: 2018 hunter harvest results (top table), long-term average (LTA) and recent 10-year averages (bottom table) presented for all districts managed by Bozeman Area Wildlife Biologist, with HD 327 and HD 328 highlighted for comparison.

2018 RESULTS	HD 324	HD 325	HD 326	HD 327	HD 328	HD 361	HD 362	HD 393
# licenses	6	4	2	2	2	2	6	5
2018 # hunters	6	4	1	2	1	2	6	4
2018 harvest	6	4	1	0	1	2	6	4
2018 % success	100%	100%	100%	0	100%	100%	100%	100%
2018 % females	0	0	0	0	100%	0	50%	25%

	HD 324	HD 325	HD 326	HD 327	HD 328	HD 361	HD 362	HD 393
LTA success	0.92	0.81	0.75	0.79	0.78	n/a	0.84	0.86
LTA ppn female	0.33	0.13	0.35	0.33	0.46	n/a	0.35	0.33
10-yr success	0.90	0.77	0.84	0.75	0.73	1.00	0.84	0.90
10-yr ppn female	0.24	0.03	0.30	0.25	0.45	0.13	0.43	0.26
10-yr av age	6.4	5.3	5.3	6.5	5.6	7.3	5.9	5.6
10-yr av length*	8.5	8.2	7.4	8.1	7.9	8.7	8.4	9.5

(*both horns)

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- 5. Provide information related to any weather/habitat factors, public or private land use or resident or nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, temperature / precipitation information).**

Both HD 327 and HD 328 are almost completely public land wilderness, and both are reasonably accessible through publicly accessible trailheads. In HD 327 there are two trailheads that are inaccessible to the public, but there are ways around to goat habitat from other trailheads. Hunters in HD 327 should be prepared to hike or use horses, as mountain goat habitat is generally 5-10 miles from a parking area. HD 328 is more accessible but alpine mountain goat habitat is limited in the area. Goat habitat is 2-5 miles from a road.

- 6. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

This proposal has been vetted twice, through flight reports and dedicated e-mails, to more than 200 people including the Rocky Mountain Goat Alliance, landowners, outfitters, NGOs, and other agency personnel. The main concern in bundling HD 328 and 327 is that hunters could continue to take nannies from lower-elevation, more accessible winter range. However, most people who were concerned believe that with the proposed lower number of licenses, the amount of potential offtake may not make much difference. Many people appreciate the larger area to hunt and larger opportunities.

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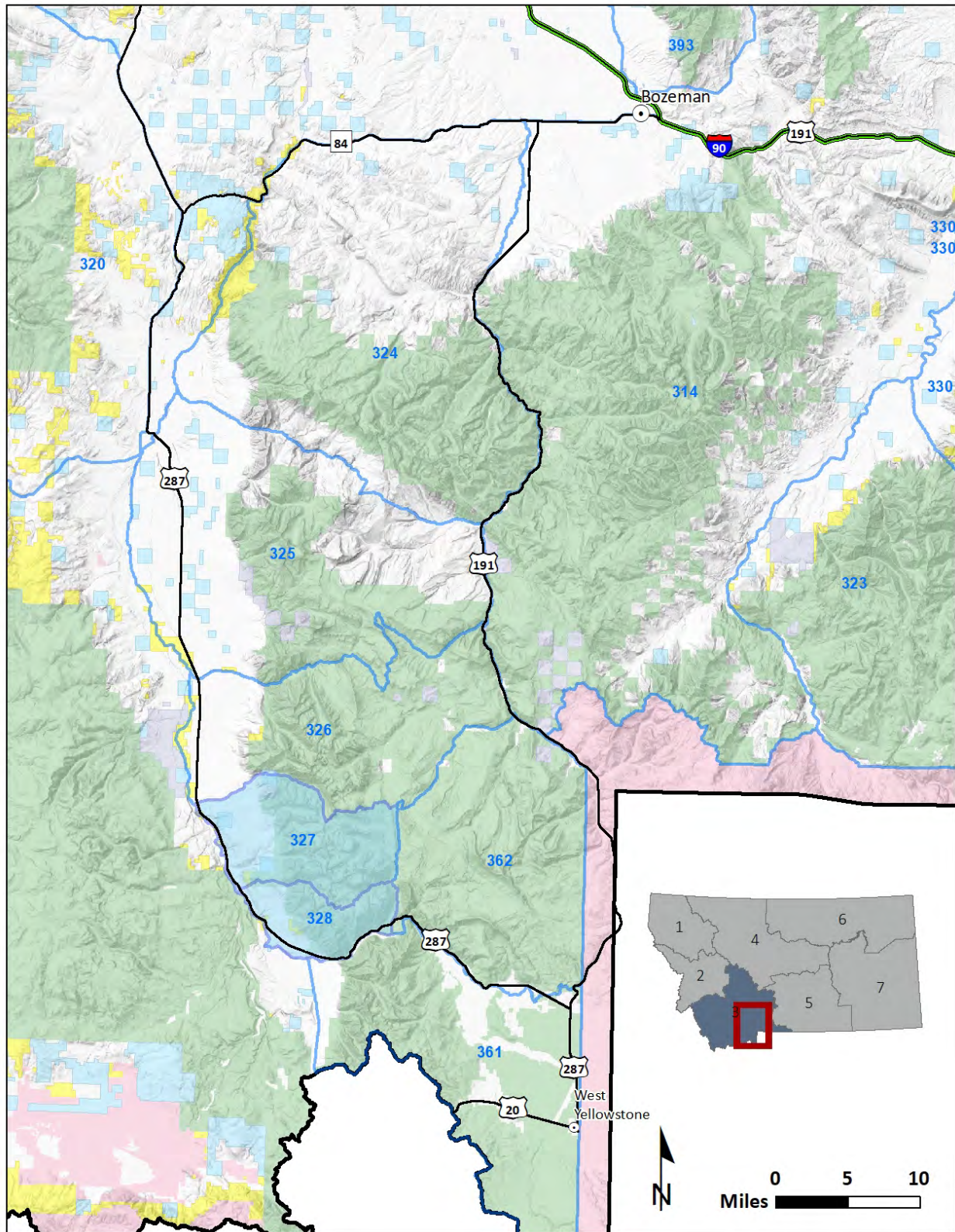


Figure 6: Mountain goat districts south of Bozeman with the proposed changes shaded in blue. Proposed change to combine HD 327 and HD 328 and keep total number of licenses to 2.

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Submitted by: Julie Cunningham
Date: 10/11/2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

Literature Cited

- Festa-Bianchet, M. and S. Côté. 2008. Mountain goats: ecology, behavior, and conservation of an alpine ungulate. Island Press, Washington D.C., USA. 265pp.
- McWhirter, D. and L. Roop. 2007. Mountain Goat (*Oreamnos americanus*). Chapter 7 in: Handbook of Biological Techniques. Third Edition. Eds. S.A. Tessmann and H. R. Bohne. Wyoming Game and Fish Department.

MONTANA FISH, WILDLIFE & PARKS BOUNDARY CHANGE SUPPORTING INFORMATION

Species: Mountain Goat
Region: 5
Hunting District: 521
Year: 2020

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

This proposed boundary defines a new mountain goat hunting district in Region 5.

521 Two Sisters: Those portions of Stillwater and Sweet Grass Counties lying within the following described boundary; Beginning at the junction of the Main Boulder River and East Chippy Creek, then easterly up said creek to the divide at the head of Forge Creek, then easterly down Forge Creek to the East Boulder River, then southerly up said river to the divide at Divide Creek, then southerly down Divide Creek to the West Fork of the Stillwater River, then easterly down said river to Saderbalm Creek, then southerly up said creek to the East Fork of Saderbalm Creek, then up said creek to the divide near the Sweet Grass/Stillwater County line and the headwaters of unnamed creek, then southeasterly down said creek to its confluence with the Stillwater River just north of Sioux Charlie Lake, then southerly up said river to Wounded Man Creek, then northerly up said creek to the Stillwater-Boulder River divide at Columbine Pass, then northerly along said divide to Rainbow Creek, then down said creek to its junction with the East Fork Boulder River, then westerly down said river to its junction with the Main Boulder

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River, then northerly down said river to its junction with East Chippy Creek, the point of beginning.

2. Why is the proposed change necessary?

Mountain goats have expanded both in numbers and distribution along the Boulder/Stillwater divide in recent years. This expansion has resulted in increased goat numbers in the Flood Creek/Two Sisters/Tumble Mountain areas of the western Beartooth Mountains. This area is currently not included in any mountain goat hunting district. The expansion of goats offers the opportunity to provide additional hunter opportunity by opening a new hunting district for goat harvest. The Flood Creek/Two Sisters/Tumble Mountain area also is the primary spring lambing/nursery area and summer range for the bighorn sheep that winter at low elevation south of Nye, MT. Recent research from Montana State University has suggested the potential for conflict between expanding mountain goat populations and native bighorn populations, including potential for forage competition, social conflict or disease transmission. Minimizing the rate of increase of mountain goats through hunter harvest will reduce the potential for these conflicts to develop.

3. What is the current population's status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

The Flood Creek/Two Sisters/Tumble Mountain area is outside of the hunting districts typically surveyed in Regions 3 and 5. However, several dedicated bighorn hunters have supplied counts of goats in this area over the last couple of years. In 2018 these hunters counted a minimum of 33 goats. These same hunters tallied a minimum of 38 goats in 2019 and noted increasing numbers of goats on the northern end of the area. The objective would be to stabilize the goat herd at no more than 35 countable goats.

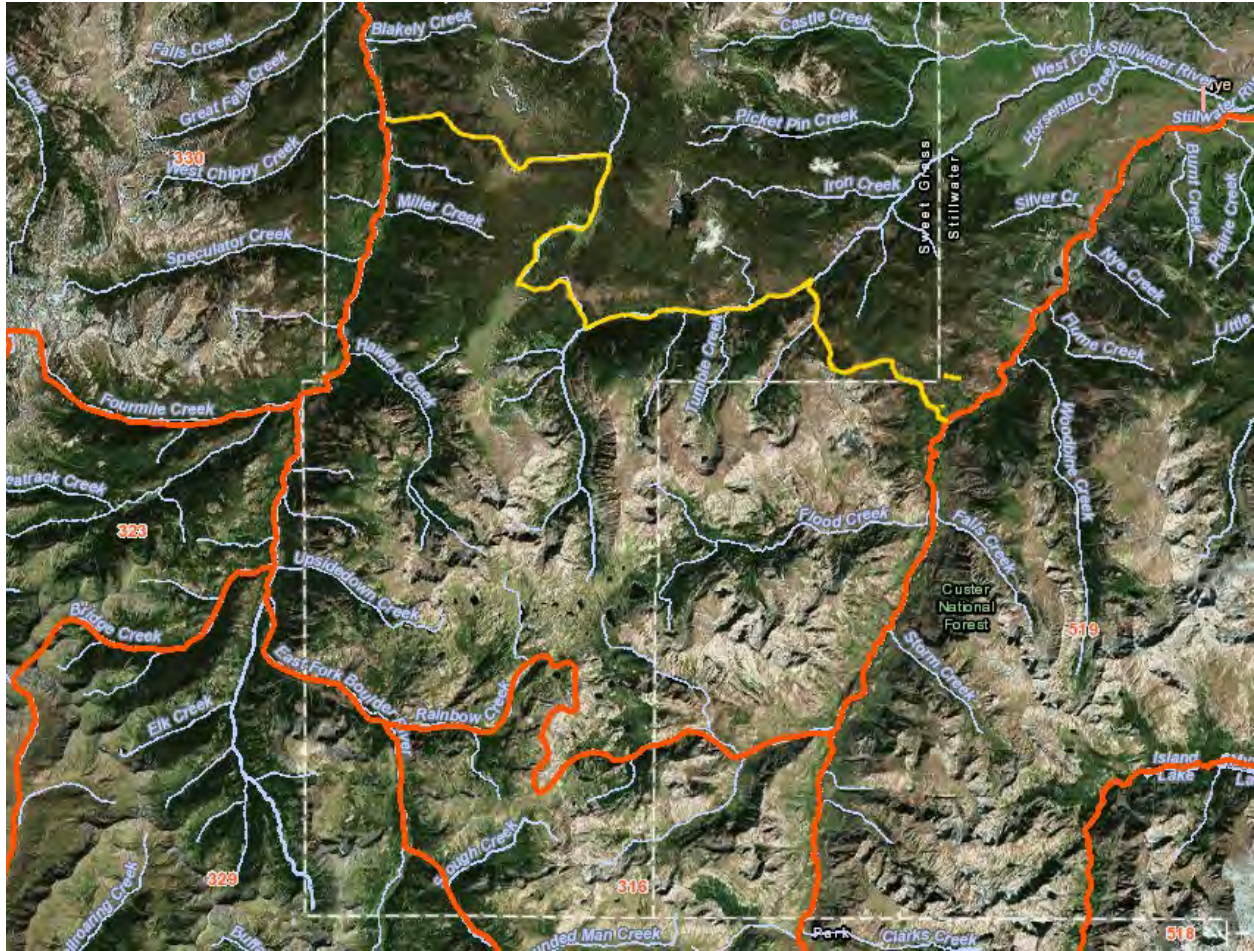
4. Provide information related to any weather/habitat factors that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, temperature / precipitation information).

Goat numbers have continued to increase despite recent severe winters.

5. Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).

This proposal is largely the result of communications with bighorn hunters that spend time in HD 500. The Rocky Mountain Goat Alliance has also been contacted regarding the potential for a hunting season in this area.

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Map of the proposed goat hunting district 521. Bordered on the east, south and west in orange by current goat HDs. North boundary is in yellow.

Submitted by: Shawn T. Stewart
Date: October 1, 2019

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification: